

EXHIBIT 4

1 UNITED STATES DISTRICT COURT
2 DISTRICT OF NEW JERSEY
3 CIVIL ACTION NO. 13-7871 (FLW) (TJB)
4

5 KIMBERLY COLE, ALAN COLE,)
6 JAMES MONICA, LINDA BOYD,)
7 MICHAEL MCMAHON, RAY SMINKEY,)
8 JAMES MEDDERS, JUDY MEDDERS,)
9 ROBERT PEPERNO, SARAH PEPERNO,)
10 AND KELLY MCCOY, on behalf)
11 of themselves and all others)
12 similarly situated,)
13)

14 Plaintiffs,)
15)

16 vs.)
17)

18 NIBCO, INC.,)
19)

20 Defendant.
21

22 DEPOSITION OF DAVID BOBO
23

24 The deposition of DAVID BOBO, a witness
25 produced and sworn before me, Richard Ehrlich,
RMR, CRR, a Notary Public in and for the County of
Lake, State of Indiana, taken on behalf of the
Plaintiffs, at the Hilton Garden Inn Elkhart, 3401
Plaza Court, Elkhart, Indiana, on the 2nd day of
February, 2017, at 9:00 a.m., pursuant to the
Federal Rules of Trial Procedure with written
notice as to time and place thereof.

<p style="text-align: right;">Page 2</p> <p>1 APPEARANCES</p> <p>2</p> <p>3 FOR THE PLAINTIFFS:</p> <p>4 Kyle A. Shamberg</p> <p>5 LITE DEPALMA GREENBERG</p> <p>6 211 W. Wacker Drive</p> <p>7 Suite 500</p> <p>8 Chicago, IL 60606</p> <p>9 312.750.1265</p> <p>10 kshamberg@litedepalma.com</p> <p>11</p> <p>12 Lawrence Deutsch</p> <p>13 Jacob M. Polakoff</p> <p>14 BERGER & MONTAGUE, P.C.</p> <p>15 1622 Locust Street</p> <p>16 Philadelphia, PA 19103-6305</p> <p>17 215.875.3000</p> <p>18 ldeutsch@bm.net</p> <p>19 jpolakoff@bm.net</p> <p>20</p> <p>21 FOR THE DEFENDANT:</p> <p>22 Jean Paul Bradshaw</p> <p>23 LATHROP & GAGE, LLP</p> <p>24 2345 Grand</p> <p>25 Kansas City, MO 64108</p> <p>816.292.2000</p> <p>jpb Bradshaw@lathropgage.com</p> <p>VERITEXT LEGAL SOLUTIONS</p> <p>MID-ATLANTIC REGION</p> <p>1801 Market Street – Suite 1800</p> <p>Philadelphia, PA 19103</p>	<p style="text-align: right;">Page 4</p> <p>1 DAVID BOBO,</p> <p>2 having been duly sworn to tell the truth, the whole truth</p> <p>3 and nothing but the truth relating to said matter, was</p> <p>4 examined and testified as follows:</p> <p>5 DIRECT EXAMINATION</p> <p>6 QUESTIONS BY MR. LAWRENCE DEUTSCH:</p> <p>7 Q Good morning, Mr. Bobo. I am Larry Deutsch. I</p> <p>8 represent the plaintiffs in the Meadow case, and</p> <p>9 we filed the case as a nationwide class action</p> <p>10 regarding defects in NIBCO PEX plumbing. So</p> <p>11 we're here today to take your testimony.</p> <p>12 And you've been deposed before, right?</p> <p>13 A One time, yes.</p> <p>14 Q One time. And that was in the Christianson</p> <p>15 case?</p> <p>16 A I believe so.</p> <p>17 Q Okay. And I know you have competent counsel</p> <p>18 here with you today, but just to review the</p> <p>19 standards of a deposition, it's worth going over</p> <p>20 one more time for you.</p> <p>21 Obviously, you're under oath, so we expect</p> <p>22 you to tell the truth in whatever question we</p> <p>23 ask.</p> <p>24 You know, we'll try not to talk over each</p> <p>25 other. I'll try to make sure I've completed my</p>
<p style="text-align: right;">Page 3</p> <p>1 INDEX OF EXAM</p> <p>2 DIRECT EXAMINATION4</p> <p>3 Questions by MR. LAWRENCE DEUTSCH</p> <p>4 CROSS-EXAMINATION214</p> <p>5 Questions by KYLE A. SHAMBERG</p> <p>6 INDEX OF EXHIBITS</p> <p>7 Exhibit 80 - NIBCO PEX Development Program,41</p> <p>8 Compilation Report</p> <p>9 Exhibit 81 - PEX Dev. Strategy, Executive91</p> <p>10 Review</p> <p>11 Exhibit 82 - Email chain100</p> <p>12 Exhibit 83 - Email chain119</p> <p>13 Exhibit 84 - PEX Dev. Strategy, Jana126</p> <p>14 Program</p> <p>15 Exhibit 85 - Total Petrochemicals,129</p> <p>16 Polyolefins Call Report</p> <p>17 Exhibit 86 - Email chain135</p> <p>18 Exhibit 87 - Email from David Bobo dated140</p> <p>19 10/8/09</p> <p>20 Exhibit 88 - Email from Patrick Vibien145</p> <p>21 dated 11/8/09</p> <p>22 Exhibit 89 - Email chain148</p> <p>23 Exhibit 90 - Email chain157</p> <p>24 Exhibit 91 - PEX Development Strategy,158</p> <p>25 April 2010</p> <p>Exhibit 92 - Flow chart163</p> <p>Exhibit 93 - Project 09-1159, Compilation170</p> <p>Report, E-Beam Process Improvement</p> <p>Exhibit 94 - Email from David Bobo dated184</p> <p>12/1/10</p> <p>Exhibit 95 - Email chain188</p> <p>Exhibit 96 - Email chain191</p> <p>Exhibit 97 - Email chain193</p> <p>Exhibit 98 - 651 PEXc Reformulation,194</p> <p>Tollgate 1</p> <p>Exhibit 99 - 651 PEXc Reformulation,197</p> <p>Tollgate 3</p> <p>Exhibit 100 - Email chain200</p> <p>Exhibit 101 - 651 PEXc Reformulation,202</p> <p>Tollgate 5</p> <p>Exhibit 102 - Flow chart207</p> <p>Exhibit 103 - Flow chart208</p> <p>Exhibit 104 - Flow chart209</p> <p>Exhibit 105 - Flow chart210</p>	<p style="text-align: right;">Page 5</p> <p>1 question and fully get your answer before I ask</p> <p>2 you another question.</p> <p>3 If you don't understand a question, please</p> <p>4 feel free to ask me to clarify it, since we're</p> <p>5 going to assume you understood the question if</p> <p>6 you give an answer on it.</p> <p>7 And finally, if you need to take a break,</p> <p>8 you should let us know. I would ask that you</p> <p>9 complete your answer to any pending question</p> <p>10 before we take a break.</p> <p>11 So do you understand those standards for</p> <p>12 the deposition, right?</p> <p>13 A Yes.</p> <p>14 Q Okay. Did you do anything in particular to</p> <p>15 prepare to testify today?</p> <p>16 A Just met with counsel.</p> <p>17 Q Okay. Did you look at any documents?</p> <p>18 A They asked me to review a couple of documents</p> <p>19 that potentially could come up.</p> <p>20 Q Okay. And which documents did you look at?</p> <p>21 A I think it was a report that I had written</p> <p>22 early -- or early in 2009.</p> <p>23 Q Do you know the date of the report or just --</p> <p>24 A No.</p> <p>25 Q Okay.</p>

<p style="text-align: right;">Page 6</p> <p>1 A I don't remember off the top of my head.</p> <p>2 Q Okay. And -- so there was a report, and what</p> <p>3 other documents did you look at to prepare for</p> <p>4 today?</p> <p>5 A I believe it was just my previous deposition.</p> <p>6 Q In other words, in the Christianson case?</p> <p>7 A Yes, I believe so.</p> <p>8 Q Was there anything -- when you looked at the</p> <p>9 Christianson transcript, was there any</p> <p>10 corrections you thought you needed to make to</p> <p>11 any of the statements you made on the record in</p> <p>12 the Christianson case?</p> <p>13 A Not that I can recall.</p> <p>14 Q Anything besides the transcript and the report</p> <p>15 that you said from -- your report from early</p> <p>16 2009 that you reviewed for this deposition?</p> <p>17 A Not that I remember, no.</p> <p>18 Q Did you talk to anybody besides counsel about</p> <p>19 the deposition you were going to give today?</p> <p>20 A No.</p> <p>21 Q Did you talk to Mr. Perry, who we deposed</p> <p>22 yesterday?</p> <p>23 A I just asked him if he knew where we were</p> <p>24 supposed to be at.</p> <p>25 Q And nothing else?</p>	<p style="text-align: right;">Page 8</p> <p>1 A I don't remember.</p> <p>2 Q Okay. So let's just focus for a second on your</p> <p>3 background. So could you briefly take me</p> <p>4 through your educational history?</p> <p>5 A Okay. I graduated high school from Hoxie High</p> <p>6 School in Arkansas. I graduated from Arkansas</p> <p>7 State University with a Bachelor's of Science in</p> <p>8 engineering with a professional concentration in</p> <p>9 electrical, and I'm currently an MBA student at</p> <p>10 Indiana University - South Bend.</p> <p>11 Q And when do you expect to complete your MBA</p> <p>12 studies?</p> <p>13 A May.</p> <p>14 Q And are you taking the MBA partly due to a</p> <p>15 suggestion by management at NIBCO that you</p> <p>16 increase your education?</p> <p>17 A No.</p> <p>18 Q Okay. It's self-initiated?</p> <p>19 A Sure.</p> <p>20 Q Why don't we also now take a look at your work</p> <p>21 history after you graduated from college?</p> <p>22 A Okay. I started my career with a company called</p> <p>23 Marathon Electric in West Plains, Missouri; I</p> <p>24 left there to go to work for Black & Decker</p> <p>25 Corporation in Fayetteville, North Carolina; I</p>
<p style="text-align: right;">Page 7</p> <p>1 A No.</p> <p>2 Q Okay. Could you describe the report that you</p> <p>3 say you reviewed in preparation for today's</p> <p>4 deposition? What's the substance of that</p> <p>5 report?</p> <p>6 A I am really not sure what you're asking.</p> <p>7 Q Okay. Since it's a very particular document</p> <p>8 that you looked at, I guess I'm curious what the</p> <p>9 significance of that document was for today's</p> <p>10 deposition?</p> <p>11 A I believe it was a document that began kind of</p> <p>12 the beginning of our reformulation project for</p> <p>13 PEXc product.</p> <p>14 Q And you wrote that document, in other words?</p> <p>15 A Yes.</p> <p>16 Q Okay. And did you write it -- was it your</p> <p>17 initiative or did somebody say, hey, could you</p> <p>18 focus on this and write a report about it?</p> <p>19 A There was not a request to write a report that I</p> <p>20 can remember.</p> <p>21 Q And so why did you write the report in early</p> <p>22 2009 about the reformulation?</p> <p>23 A Actually, I don't remember why.</p> <p>24 Q Did anybody assist you in writing the report or</p> <p>25 was that entirely your work?</p>	<p style="text-align: right;">Page 9</p> <p>1 left Black & Decker to go to work for Rheem</p> <p>2 Water Heating in Montgomery, Alabama; and left</p> <p>3 Rheem Water Heating to go to work for NIBCO.</p> <p>4 Q Okay. We can break that down a little.</p> <p>5 So you went to work for Marathon Electric</p> <p>6 in what year?</p> <p>7 A It would have been in March of 1995.</p> <p>8 Q And you worked there until when?</p> <p>9 A April of 1997.</p> <p>10 Q And what were your duties and responsibilities</p> <p>11 at Marathon Electric?</p> <p>12 A I was a quality assurance engineer.</p> <p>13 Q And what were the products that you were quality</p> <p>14 engineer for?</p> <p>15 A They manufactured induction electric motors.</p> <p>16 Q And why did you leave Marathon Electric?</p> <p>17 A I received a job offer from Black & Decker</p> <p>18 Corporation.</p> <p>19 Q So that was in April of 1997?</p> <p>20 A Yes.</p> <p>21 Q And you worked for Black & Decker until when?</p> <p>22 A I believe it was until December of 2004.</p> <p>23 Q And what were your duties and responsibilities</p> <p>24 at Black & Decker?</p> <p>25 A I started as a new products quality assurance</p>

<p style="text-align: right;">Page 10</p> <p>1 engineer and then was also a manufacturing 2 engineer and then became a productivity team 3 leader. 4 Q Okay. Can we break that down to each one? So 5 new products quality assurance -- 6 A Engineer. 7 Q Engineer. And could you describe in detail what 8 that involved? 9 A It's basically -- it was support of new product 10 development at Black & Decker Corporation and 11 specifically for the Fayetteville manufacturing 12 location. 13 Q And what products did your work focus on? 14 A Primarily the DeWalt product lines of power 15 tools. I believe that we worked on -- while I 16 was there, I worked on actually a Black & Decker 17 Wood Hawk mitre saw -- or circular saw. 18 I worked on a -- the new product 19 development of a series of DeWalt cut saws or 20 reciprocating saws. 21 I worked for -- worked on the development 22 of several mitre saw projects, and I worked 23 on -- let's see. Several -- I can't remember 24 all of them. 25 Q So after doing that assignment for</p>	<p style="text-align: right;">Page 12</p> <p>1 effective. 2 Q Okay. Now, were each of those roles you had at 3 Black & Decker, were they promotions for you? 4 A They were different responsibilities in 5 different areas. So I don't know if it can be 6 deemed a promotion or not. They're different 7 responsibilities. 8 Q And why did you leave Black & Decker? 9 A I received a job offer from Rheem Water Heating. 10 Q So did you begin working for Rheem in December 11 of 2004? 12 A Actually, I believe it was in January of 2005 13 that I actually started there. 14 Q And what were your duties and responsibilities 15 at Rheem Water Heater? 16 A I was a senior manufacturing project engineer. 17 Q And could you elaborate on what that involved? 18 A We were responsible for developing the 19 manufacturing processes associated with new 20 product introductions. 21 Q And what products did that encompass? 22 A Water heaters. 23 Q Was that the only role you had at Rheem Water 24 Heaters? 25 A Yes.</p>
<p style="text-align: right;">Page 11</p> <p>1 Black & Decker, you said you became a 2 manufacturing engineer? 3 A Manufacturing and project engineer. 4 Q Okay. And what did that involve? 5 A It was -- instead of working just on the quality 6 side of new product development, I was 7 responsible for the manufacturing development of 8 new products for certain product lines. 9 Q Okay. When you say you were responsible for 10 manufacturing development, could you explain 11 what that means? 12 A It means basically that we would work with the 13 design engineers to guide the design to 14 something that was more manufactural, and then 15 we were responsible for developing any of the 16 manufacturing processes that were in support of 17 that product development. So responsible for 18 the assembly line, any kind of production 19 tooling, so on and so forth. 20 Q Okay. And then you mentioned that you then 21 became a productivity team leader at 22 Black & Decker. What did that involve? 23 A Yes. It basically -- our goal was to reduce the 24 standard cost of the product, a mature 25 manufactured product, to become more cost</p>	<p style="text-align: right;">Page 13</p> <p>1 Q In any of your jobs that you've described, 2 Marathon Electric, Black & Decker, Rheem Water 3 Heater, did you have involvement with developing 4 or managing plastic products? 5 A Sure. 6 Q Okay. 7 A Yes. 8 Q Which ones? 9 A Well, for Black & Decker Corporation, we 10 manufactured a lot of plastic components. 11 Q And you stayed at Rheem Water Heater until when? 12 A I believe it was until October of 2008. 13 Q And why did you leave Rheem Water Heater? 14 A I received a job offer from NIBCO. 15 Q Okay. And you began working at NIBCO when? 16 A I believe it was in October of 2008. 17 Q And could you describe in more detail how you 18 came to be hired at NIBCO? Like who introduced 19 you and who did you interview with? 20 A Actually, I worked with a headhunter. 21 Q What was the name of the headhunter? 22 A I believe his name was David Cole. 23 Q Did he work for a certain company? 24 A I can't remember the name of the company. 25 Q And did you interview with people at NIBCO?</p>

<p style="text-align: right;">Page 14</p> <p>1 A Yes.</p> <p>2 Q Okay. Who did you interview with?</p> <p>3 A I don't remember everybody at that point in</p> <p>4 time.</p> <p>5 Q Okay. Anybody?</p> <p>6 A Rick Noel, and I really don't remember their</p> <p>7 name. I'm sure there were several other people,</p> <p>8 but I just don't remember off the top of my</p> <p>9 head.</p> <p>10 Q And so was there a particular job you were</p> <p>11 offered at NIBCO?</p> <p>12 A Yes.</p> <p>13 Q And what was that specific job?</p> <p>14 A It was to be a program manager.</p> <p>15 Q And how was it described to you what your</p> <p>16 responsibilities would be as a program manager</p> <p>17 at NIBCO?</p> <p>18 A It would be to lead cross-functional teams</p> <p>19 associated with new product development.</p> <p>20 Q And so you accepted that job; is that right?</p> <p>21 A Yes.</p> <p>22 Q And what were your first duties at NIBCO as a</p> <p>23 program manager?</p> <p>24 A I'm not sure I understand exactly what you're</p> <p>25 asking there.</p>	<p style="text-align: right;">Page 16</p> <p>1 PEX tubing, what was the focus of that project?</p> <p>2 A NIBCO wanted to have -- gain market share with</p> <p>3 the PEX tubing, and so it was trying to</p> <p>4 understand the PEX business and then to</p> <p>5 determine what was the best path forward to help</p> <p>6 gain market share.</p> <p>7 Q And what were the initial ideas about how to</p> <p>8 gain market share that were presented to you</p> <p>9 when you first joined NIBCO as a program</p> <p>10 manager?</p> <p>11 A I don't know that anyone presented anything to</p> <p>12 me from that standpoint, no.</p> <p>13 Q But did somebody state that that was a goal for</p> <p>14 the PEX business and they wanted you to pursue</p> <p>15 that?</p> <p>16 A Not that I remember specifically that -- anyone</p> <p>17 stating anything like that. It was just more of</p> <p>18 an understood that we wanted to -- with any</p> <p>19 business, that we want to grow the business.</p> <p>20 Q Okay. When you started as the program manager,</p> <p>21 were there certain people that reported to you</p> <p>22 initially?</p> <p>23 A No. I had no direct reports.</p> <p>24 Q And when you say you worked as a -- you know,</p> <p>25 you lead cross-functional teams, which teams</p>
<p style="text-align: right;">Page 15</p> <p>1 Q Okay. Well, you described it as program manager</p> <p>2 leads cross-functional teams for new products.</p> <p>3 Were there certain new products you became</p> <p>4 involved with right when you began at NIBCO in</p> <p>5 October of 2008?</p> <p>6 A I can't remember all of the projects at that</p> <p>7 point in time, no.</p> <p>8 Q Okay. Any of them?</p> <p>9 A Well, I mean, the work with Jana Laboratories</p> <p>10 relative to the PEX tubing was getting started</p> <p>11 at that point in time.</p> <p>12 Q When you say it was getting started, was</p> <p>13 somebody working on a project PEX tubing with</p> <p>14 Jana when you first started at NIBCO?</p> <p>15 A I'm not sure on that. I don't -- I don't</p> <p>16 remember.</p> <p>17 Q All right. Did anybody give you, like, I don't</p> <p>18 know, background records for dealing with</p> <p>19 Jana Labs on the PEX tubing project?</p> <p>20 A Not that I remember.</p> <p>21 Q Who did you report to in your first role at</p> <p>22 NIBCO as program manager?</p> <p>23 A It was Rick Noel.</p> <p>24 Q And when you say, you know, one of the first</p> <p>25 projects you worked on was Jana Labs regarding</p>	<p style="text-align: right;">Page 17</p> <p>1 were you involved with at this initial phase of</p> <p>2 NIBCO?</p> <p>3 A I don't remember the specific projects. I mean,</p> <p>4 I'm sure there were other projects; I just don't</p> <p>5 remember exactly what all they were.</p> <p>6 Q I'm asking at this early phase -- again, we're</p> <p>7 talking about October 2008 or thereabouts --</p> <p>8 were there certain members of NIBCO that you</p> <p>9 were interfaced with on this, let's say, the</p> <p>10 Jana Lab PEX tubing project?</p> <p>11 A I'm sure there were. I mean, the members of the</p> <p>12 team, as the team -- as the work progressed, but</p> <p>13 primarily I believe it was interfacing directly</p> <p>14 with Jana at that point in time and then working</p> <p>15 with Rick Noel and I believe Gary Wilson and</p> <p>16 probably Randy Doering, right, relative to,</p> <p>17 okay, developing what did they -- what did --</p> <p>18 was the recommendation going forward.</p> <p>19 Q By the way, what was Mr. Noel's title and role</p> <p>20 at NIBCO when you first started working for him?</p> <p>21 A I don't remember his specific title. I believe</p> <p>22 it was director of product development.</p> <p>23 Q Who at Jana did you interface with when you</p> <p>24 first started at NIBCO in October of 2008?</p> <p>25 A I'm not sure it actually was in October of 2008</p>

<p style="text-align: right;">Page 18</p> <p>1 that we started interfacing with Jana, but names</p> <p>2 that were associated with the project were</p> <p>3 Wayne Bryce, Patrick Vibien, Dr. Oliphant -- I</p> <p>4 think his first name was Ken, I'm not sure --</p> <p>5 and then as the project progressed there were</p> <p>6 different people associated with it, but those</p> <p>7 were probably the primary three at the</p> <p>8 beginning.</p> <p>9 Q And what were their roles at Jana vis-a-vis</p> <p>10 working with NIBCO?</p> <p>11 A Wayne Bryce, I believe, is the owner -- was the</p> <p>12 owner of -- or half -- or one owner of</p> <p>13 Jana Labs, and I think Dr. Oliphant was the</p> <p>14 other owner, and then Patrick Vibien was their</p> <p>15 lead person for at least the initial phase of</p> <p>16 the project.</p> <p>17 Q And what's your understanding of Jana's</p> <p>18 expertise? What are they expert in?</p> <p>19 A I'm not sure what they're an expert in.</p> <p>20 Q Has anybody ever said to you, this is Jana's</p> <p>21 realm of expertise?</p> <p>22 A I know they have a background in PEX tubing and</p> <p>23 PEX in general, but I'm not sure that, you</p> <p>24 know -- I don't know what the definition of</p> <p>25 "expert" means, right, so --</p>	<p style="text-align: right;">Page 20</p> <p>1 A I believe it was in April of 2009.</p> <p>2 And then now I am director of product</p> <p>3 engineering.</p> <p>4 Q And when did that occur, that you were promoted</p> <p>5 to that position?</p> <p>6 A Well, I'm not sure it's a promotion; it's a</p> <p>7 change of responsibilities. And I believe it</p> <p>8 occurred in December of 2011.</p> <p>9 Q And how did you come to become the director of</p> <p>10 program -- of the program management office?</p> <p>11 A I was asked to.</p> <p>12 Q Somebody approached you?</p> <p>13 A Yes.</p> <p>14 Q And who was that?</p> <p>15 A I don't remember.</p> <p>16 Q And could you describe --</p> <p>17 A Oh, I'm sorry. You asked how did I become the</p> <p>18 director of the program --</p> <p>19 Q The program management office in April of 2009?</p> <p>20 A It was -- actually, from that one, it was a job</p> <p>21 posting and I applied.</p> <p>22 Q And who did you interview with for that job?</p> <p>23 A I don't remember everybody that I interviewed</p> <p>24 with.</p> <p>25 Q And who informed you that you were selected for</p>
<p style="text-align: right;">Page 19</p> <p>1 Q Does NIBCO still work with Jana?</p> <p>2 A I don't know.</p> <p>3 Q Did you stop working with them?</p> <p>4 A I believe Jana was purchased by -- at least the</p> <p>5 testing labs portion of it -- was purchased by</p> <p>6 NSF and so I'm not sure what the relationship</p> <p>7 there is.</p> <p>8 So their Jana Laboratories portion of it,</p> <p>9 I'm sure -- since they're part of NSF, we still</p> <p>10 work with NSF.</p> <p>11 Q But presently would only be working on</p> <p>12 certification issues for when you work with Jana</p> <p>13 as part of NSF now?</p> <p>14 A Well, we work with NSF. We have a lot of</p> <p>15 different products that have listings with NSF.</p> <p>16 Q But would NIBCO continue to hire Jana, even as a</p> <p>17 sub of NSF, for other projects outside of</p> <p>18 maintaining certifications?</p> <p>19 A I'm not aware of any.</p> <p>20 Q So after beginning your career at NIBCO as a</p> <p>21 program manager, at some time did you change</p> <p>22 duties?</p> <p>23 A I was promoted to director of the program</p> <p>24 management office.</p> <p>25 Q And when did that occur?</p>	<p style="text-align: right;">Page 21</p> <p>1 the -- your new position of director of program</p> <p>2 office?</p> <p>3 A Gary Wilson.</p> <p>4 Q And did Gary Wilson become your new supervisor</p> <p>5 in that position?</p> <p>6 A Yes.</p> <p>7 Q So can you describe your duties and</p> <p>8 responsibilities as director of program</p> <p>9 management office?</p> <p>10 A I had three program managers that reported to me</p> <p>11 and then, as a result of that, I was their</p> <p>12 supervisor as well as continued to lead</p> <p>13 cross-functional teams and -- for various</p> <p>14 projects.</p> <p>15 Q And who were the three program managers that</p> <p>16 reported to you?</p> <p>17 A Well, it changed over different times.</p> <p>18 Q Okay. Just describe what you can recall of who</p> <p>19 initially and then, to the extent you can, who</p> <p>20 took those roles. I guess it's between</p> <p>21 April 2009 and December 2011?</p> <p>22 A I believe that initially it was Rema Kunder.</p> <p>23 Q How do you spell that?</p> <p>24 A K-U-N-D-E-R.</p> <p>25 Q How do you spell the first name?</p>

<p style="text-align: right;">Page 22</p> <p>1 A R-E-M-A.</p> <p>2 Q Okay.</p> <p>3 A And Brent Eckerly and Doug -- I can't remember</p> <p>4 Doug's last name. It's escaping me right now.</p> <p>5 Q Okay. Do you think those were the three initial</p> <p>6 program managers?</p> <p>7 A Yes.</p> <p>8 Q How were the duties divided between those three</p> <p>9 under your direction?</p> <p>10 A They were working on individual projects as they</p> <p>11 came up. As new products, development projects</p> <p>12 were approved, then they were then assigned.</p> <p>13 Q When you say when new products I guess</p> <p>14 initiatives were approved, who would approve</p> <p>15 them?</p> <p>16 A Upper management.</p> <p>17 Q And when you use that term "upper management,"</p> <p>18 who are you incorporating?</p> <p>19 A In essence, it's a -- NIBCO follows a tollgate</p> <p>20 process, and the projects are approved at a</p> <p>21 Tollgate 0 process. So they're approved by the</p> <p>22 new product committee.</p> <p>23 Q When you use the term "tollgate process," could</p> <p>24 you describe what that means?</p> <p>25 A It is a very typical stage gate process that has</p>	<p style="text-align: right;">Page 24</p> <p>1 Q Do you know who is on the board of directors</p> <p>2 besides Mr. Martin?</p> <p>3 A I don't remember the name specifically. I know</p> <p>4 a few of them, right, but there's been a recent</p> <p>5 change and I'm not sure exactly everybody that's</p> <p>6 on it now.</p> <p>7 Q Any of the names?</p> <p>8 A Well, I know Steve Malm, Rex Martin,</p> <p>9 Alice Martin, Art Decio, and then I believe</p> <p>10 there are two new members that I -- I can't --</p> <p>11 the names escape me right now. There may be</p> <p>12 more, right. I'm not certain.</p> <p>13 Q Okay. Well, again, focusing on this area where</p> <p>14 you're the director of program management office</p> <p>15 beginning April 2009, was there somebody</p> <p>16 assigned to initiatives in the PEX products</p> <p>17 business?</p> <p>18 A We had different projects moving forward with --</p> <p>19 at various times, right, associated with PEX.</p> <p>20 Q Okay. And who among the program managers were</p> <p>21 involved with those?</p> <p>22 A I don't remember.</p> <p>23 Q Do you remember any of them?</p> <p>24 A Well, I was involved in some of them, right, but</p> <p>25 I don't remember everybody and every initiative</p>
<p style="text-align: right;">Page 23</p> <p>1 different phases of product development and as</p> <p>2 the -- as you progress through kind of different</p> <p>3 stages of the product development, then there</p> <p>4 are certain reviews and approvals -- tollgates,</p> <p>5 i.e. -- tollgates that are given in order to</p> <p>6 continue to move forward with the project; i.e.,</p> <p>7 the product development.</p> <p>8 Q And I'm just trying to understand who were the</p> <p>9 actual people that approve the new project -- or</p> <p>10 continue to approve it through the various</p> <p>11 stages that you've just described?</p> <p>12 A It's typically like the heads of the various, if</p> <p>13 you will, functions, right, that sign off on the</p> <p>14 tollgate approvals.</p> <p>15 Q I mean, is there a certain level of commitment</p> <p>16 that it goes up to, say, Steve Malm?</p> <p>17 A Steve Malm is -- does participate in the</p> <p>18 committee.</p> <p>19 Q Would it go up to Mr. Martin?</p> <p>20 A No, not the -- for the tollgates.</p> <p>21 Q Any project that you were involved with that</p> <p>22 went to the board of directors for approval?</p> <p>23 A Any project that I'm involved with? I don't</p> <p>24 know -- or I can't remember off the top of my</p> <p>25 head.</p>	<p style="text-align: right;">Page 25</p> <p>1 that was -- at that point in time.</p> <p>2 Q Okay. Which PEX program initiatives were you</p> <p>3 involved with?</p> <p>4 A Well, I was part of the reformulation project.</p> <p>5 Q And when did that begin?</p> <p>6 A Probably in March of 2009.</p> <p>7 Q And was that the earliest date that people in</p> <p>8 NIBCO began to discuss the idea of a</p> <p>9 reformulation of the PEX product?</p> <p>10 A I don't know.</p> <p>11 Q What was the earliest that you became aware of</p> <p>12 the idea of a reformulation of the PEX product?</p> <p>13 A I don't remember the specific dates.</p> <p>14 Q At least by March of 2009?</p> <p>15 A I believe so.</p> <p>16 Q Now, you did use the term before, "new product</p> <p>17 committee." Do you know who the members of that</p> <p>18 committee were?</p> <p>19 A At that point in time, no, I don't remember</p> <p>20 everybody. It's changed as people have come and</p> <p>21 gone from NIBCO.</p> <p>22 Q All right. Well, who do you remember that has</p> <p>23 been on the committee during your tenure at</p> <p>24 NIBCO?</p> <p>25 A Steve Malm, Gary Wilson, Chris Mason, Rick Noel,</p>

<p style="text-align: right;">Page 26</p> <p>1 Clyde Hayes would have been on it at one point</p> <p>2 in time. Let's see. I mean, we had different</p> <p>3 cast members. There's additional cast members</p> <p>4 now, right, or committee members.</p> <p>5 Cody Huffines, Joel Perkins are on it now.</p> <p>6 Todd Nowicki. There's probably other names, but</p> <p>7 they're escaping me right now.</p> <p>8 Q Okay. And the new product committee, they were</p> <p>9 in charge to look at any new products across the</p> <p>10 spectrum of NIBCO's business; is that correct?</p> <p>11 A I'm not sure.</p> <p>12 Q Was there some other group or committee that</p> <p>13 would evaluate NIBCO's products besides the new</p> <p>14 products committee?</p> <p>15 A I'm -- I don't know.</p> <p>16 Q Okay. So you never encountered that, in other</p> <p>17 words?</p> <p>18 A Not that I'm aware of.</p> <p>19 Q Okay. So when you say the reformulation of PEX</p> <p>20 products was begun in March 2009, what happened</p> <p>21 at that point in time?</p> <p>22 A The project began.</p> <p>23 Q Okay. And what steps were taken to begin the</p> <p>24 project?</p> <p>25 A Well, we had project team members,</p>	<p style="text-align: right;">Page 28</p> <p>1 A I don't remember off the top of my head. I'm</p> <p>2 sure it was interaction between several people.</p> <p>3 Q Is there a specific document that would lay out</p> <p>4 what the deliverables were at the initiation of</p> <p>5 this PEX reformulation project?</p> <p>6 A Probably. I believe that there was a charter; I</p> <p>7 just don't remember specifically.</p> <p>8 Q And what do you recall as the deliverables that</p> <p>9 you were trying to achieve?</p> <p>10 A I believe it was a PEXc product that met a --</p> <p>11 had a chlorine-resistant certification level or</p> <p>12 classification level 3 that was cost</p> <p>13 competitive.</p> <p>14 Q And do you know who developed that as a goal,</p> <p>15 chlorine resistance of 3, as a goal for the PEX</p> <p>16 reformulation project?</p> <p>17 A It would have been a consensus of various people</p> <p>18 associated with the PEX business at that time.</p> <p>19 Q I'm going to go back and focus on your career</p> <p>20 track in NIBCO. We'll get back to talking about</p> <p>21 the PEX development.</p> <p>22 Did your duties as director of program</p> <p>23 management office change between April 2009</p> <p>24 until you changed jobs in December 2011?</p> <p>25 A I'm not sure really what you're asking me. In</p>
<p style="text-align: right;">Page 27</p> <p>1 cross-functional team members assigned, and the</p> <p>2 best I can recall then, you know, the work</p> <p>3 started.</p> <p>4 Q And who were the cross-functional team members</p> <p>5 at the initiation around March 2009?</p> <p>6 A It probably would have been Mark Clark,</p> <p>7 Earl Sexton, myself, Joan Platz and Jana team</p> <p>8 members.</p> <p>9 Q And who were the Jana team members?</p> <p>10 A Probably Patrick Vibien and Ken Oliphant, right.</p> <p>11 Q Anybody else?</p> <p>12 A Specifically to the reformulation project,</p> <p>13 possibly. There are probably different people</p> <p>14 interacting, but at various times, I just don't</p> <p>15 remember.</p> <p>16 Q Did the -- I guess this is like the working team</p> <p>17 for the reformulation project. Did the members</p> <p>18 of the team change over time?</p> <p>19 A I don't remember.</p> <p>20 Q And was there like -- was there a mission</p> <p>21 statement as to what the group was attempting to</p> <p>22 do?</p> <p>23 A We had, I believe, a charter or a list of</p> <p>24 deliverables that we were trying to achieve.</p> <p>25 Q And who developed that?</p>	<p style="text-align: right;">Page 29</p> <p>1 general, we still had program managers that I</p> <p>2 was responsible -- that reported up through me.</p> <p>3 I managed those and then I continued to work on</p> <p>4 projects.</p> <p>5 Q But, in other words, it wasn't expanded? You</p> <p>6 didn't have more people reporting to you during</p> <p>7 that tenure?</p> <p>8 A No.</p> <p>9 Q Okay. But then you became director of product</p> <p>10 engineering; is that right?</p> <p>11 A Yes.</p> <p>12 Q And it was December of 2011?</p> <p>13 A Yes.</p> <p>14 Q And how did you get that job?</p> <p>15 A I was asked.</p> <p>16 Q By?</p> <p>17 A Mr. David Goodling.</p> <p>18 Q And what was his position at that time?</p> <p>19 A I'm not exactly sure what his title is.</p> <p>20 Q How about what his role in the organization was?</p> <p>21 A He was responsible for manufacturing at several</p> <p>22 manufacturing locations as well as a world</p> <p>23 headquarters engineer.</p> <p>24 Q Was that a job you competed for?</p> <p>25 A Not that I'm aware of.</p>

<p style="text-align: right;">Page 30</p> <p>1 Q Okay. He just came to you and said, "We'd like 2 you to take this role"?</p> <p>3 A Yes.</p> <p>4 Q And could you describe what the duties and the 5 responsibilities of your new role were?</p> <p>6 A We have several functions that report through 7 me. We have our -- what we now call product 8 compliance; we have our test lab -- our internal 9 test lab -- we have product engineers, and then 10 we have our design group as well as our 11 corporate quality group as well as our advanced 12 quality group.</p> <p>13 Q I'm sorry, what was the last one?</p> <p>14 A Advanced quality group.</p> <p>15 Q So at that point you had a lot of people 16 reporting to you?</p> <p>17 A There are a lot of people in our -- well, "a 18 lot" is a relative term, but I believe there are 19 35 to 40 people at any given time.</p> <p>20 Q And who became your direct reports at that time, 21 when you became director of --</p> <p>22 A I don't remember all the names.</p> <p>23 Q Okay. The ones you do and what their positions 24 were?</p> <p>25 A Well, Andy Granzow is -- at the time his title</p>	<p style="text-align: right;">Page 32</p> <p>1 A No.</p> <p>2 Q No, okay. What product lines were you 3 responsible for?</p> <p>4 A It's really for the products that are primarily 5 manufactured and distributed within 6 North America under the -- as part of the NIBCO 7 brand.</p> <p>8 Q Now, you mentioned Roger Hawn reports to you in 9 the test lab. Was he in charge of the Dare Lab?</p> <p>10 A Yes, that's the same.</p> <p>11 Q And could you describe -- you said Scott Perry 12 reported to you as quality control manager. 13 What were his duties and responsibilities?</p> <p>14 A Actually, I said he reported to me as corporate 15 quality manager.</p> <p>16 Q Okay. And what were his duties and 17 responsibilities?</p> <p>18 A Well, at the time, whenever I started or took 19 over the role, Scott's group would have been 20 working to help support new product development 21 from a quality perspective and then helping to 22 assist or resolve issues that occurred with 23 maybe field issues that occurred or also to help 24 resolve or review products that were being 25 purchased and branded for NIBCO by an external</p>
<p style="text-align: right;">Page 31</p> <p>1 was standards and codes manager, now product 2 compliance manager; Roger Hawn is our test lab 3 manager; Scott Perry is our corporate quality 4 manager, and Derek -- at the time that I 5 received the promotion, Derek Oldsen was our 6 design manager, and then we have several product 7 engineers that report directly to me.</p> <p>8 Q And the product engineers that report directly 9 to you, could you describe what their functions 10 are?</p> <p>11 A They -- we have -- they work to support the 12 design of the product, manufactured product, for 13 the products that NIBCO manufactures, at least 14 domestically, and then for products that are 15 sourced externally, they help to determine or 16 audit those products before NIBCO starts to sell 17 them.</p> <p>18 As -- for manufactured products, we also 19 look at potential changes to the products to 20 either improve the manufacturability, lower the 21 cost, or improve the products overall.</p> <p>22 Q And so in your functions in your new position as 23 director of product engineering, this covered 24 the scope of all of NIBCO's product lines; is 25 that right?</p>	<p style="text-align: right;">Page 33</p> <p>1 source.</p> <p>2 His role is slightly different now. He -- 3 today he basically works to resolve our -- all 4 of the returned products come into Scott's 5 group, and they perform analysis on returned 6 products and provide, in essence, reports back 7 to technical services group.</p> <p>8 Q And by "returned products," you mean these are 9 products that were sold but the customer says 10 there's something wrong with the product; is 11 that right?</p> <p>12 A I'm not sure. Not necessarily always in all 13 cases that they're saying something is wrong 14 with the product. It's a product that needs -- 15 would like for it to come back and be understood 16 what is occurring. Right?</p> <p>17 Sometimes it's not necessarily that there's 18 a bad product; maybe it's an installation issue 19 or something like that and they're wanting it to 20 be evaluated.</p> <p>21 Q And within that function of Mr. Perry, he helps 22 manage the PER system of NIBCO; is that right?</p> <p>23 A He is a -- I wouldn't say manage the PER system; 24 I would say that he is -- provides a support 25 role to the PER system.</p>

<p style="text-align: right;">Page 34</p> <p>1 Q And who would be in charge of managing the PER 2 system? 3 A Well, the PER system is initiated by Ken McCoy 4 as the technical services manager, and then the 5 product -- like I said, the returns come in to 6 Scott Perry's group and they do the evaluation 7 that has been requested. 8 Q Now, when you switched jobs to director of 9 product engineering, did your role in the PEX 10 reformulation project change? 11 A I believe it was completed before then. I'm not 12 sure, right, on the timing of that. 13 Q So you think it was completed by December of 14 2011? 15 A I believe so, yes. I don't -- I don't remember 16 the specific dates that it ended. 17 Q And is that your present role, you're director 18 of product engineering now? 19 A Yes. 20 Q And did your duties and responsibilities in that 21 job as director of program engineering change 22 from December 2011 until the present? 23 A Can you say that one more time? 24 MR. DEUTSCH: Could you read that back? 25 (The requested text was read by the court</p>	<p style="text-align: right;">Page 36</p> <p>1 is that we -- all of the -- all of NIBCO's 2 certifications -- well, I shouldn't say all, but 3 the vast majority of NIBCO's product 4 certifications and product listings are 5 maintained -- we play a part of that; meaning, 6 that different certifications are renewed either 7 on a yearly basis or on a multiyear basis, and 8 as those renewals come up, right, I mean, that 9 comes -- the invoices for that come into our 10 group and we pay for that. 11 If there's a change to a product that 12 requires recertification or a change to the 13 listing that requires retesting over and above 14 that, we are involved in that, and that's 15 primarily headed up through Andy's group. 16 Q And what's Mark Clark's role in the 17 certification of NIBCO's products? 18 A Mark is a standards and codes -- or product 19 compliance engineer that reports through Andy. 20 So we assist -- from that regard we assist 21 with helping determine -- or helping the product 22 development teams understand what the agencies 23 are asking for and helping to deliver that as 24 part of getting -- or obtaining or renewing a 25 certification.</p>
<p style="text-align: right;">Page 35</p> <p>1 reporter.) 2 THE WITNESS: Okay. Well, it's not program 3 engineering, it's product engineering. 4 BY MR. DEUTSCH: 5 Q Product engineering, I'm sorry. 6 A And as far as -- no, I don't know of any change 7 in duties or responsibilities. 8 Q And do you still have the same organizational 9 structure that you described of the different 10 managers reporting to you -- 11 A Yes. 12 Q -- that continues to present? 13 A Yes. 14 Q Okay. 15 A I mean, slight nuances may be different in their 16 titles but, in essence, the general scope of 17 what we were doing is the same. 18 Q Now, in your jobs at NIBCO, were you involved 19 with maintaining certifications for NIBCO's PEX 20 products? 21 A Yes. 22 Q Could you describe your role in that function? 23 A Well, Andy Granzow is our standards and -- or is 24 our product compliance manager. 25 One of the functions that we have of that</p>	<p style="text-align: right;">Page 37</p> <p>1 Q Now, in the period 2008 to 2012, were you 2 involved with certification or recertification 3 of PEX products for NIBCO? 4 A Which products? 5 Q Any of the PEX products. 6 A I'm sure that I was. 7 Q Okay. Were there areas of -- well, let's focus 8 on the 1006 tubing, okay? 9 A Okay. 10 Q Were there -- could you briefly take me through 11 the history of the certification of that 12 product, the 1006 tubing, from 2008 to 2012? 13 Like who it was certified with, whether there 14 were any issues or problems with getting the 15 certifications? 16 A I believe -- I don't remember all of the 17 specifics, but I believe that the 1006 series of 18 tubing was listed with NSF, and then at some 19 point in time it was also listed with IAPMO and 20 that certification was dropped and then it was 21 reapplied, and I believe at some point in time 22 the certification was renewed with NSF in that 23 time period. 24 Q Okay. Now, could you explain -- when you say 25 they had -- it was certified by NSF and IAPMO,</p>

<p style="text-align: right;">Page 38</p> <p>1 why did you have double certification there?</p> <p>2 A Well, I believe that that had been inherited</p> <p>3 from -- I don't know for sure, right, it was</p> <p>4 there whenever I started.</p> <p>5 Q Anybody ever explain why they had double</p> <p>6 certification?</p> <p>7 A No.</p> <p>8 Q Did anybody ever discuss the certification</p> <p>9 adopted from NIBCO's acquisition of CPI or CPI's</p> <p>10 assets?</p> <p>11 A I believe the only thing that was ever explained</p> <p>12 or discussed was that the certifications were</p> <p>13 just transferred.</p> <p>14 Q From CPI to NIBCO?</p> <p>15 A I believe so, but I don't know for sure.</p> <p>16 Q And who told you that?</p> <p>17 A I don't remember.</p> <p>18 Q And why was IAPMO dropped?</p> <p>19 A Well, if I remember correctly, I believe that at</p> <p>20 that point in time NIBCO was trying to</p> <p>21 consolidate its listings with one agency where</p> <p>22 we had multiple listings for the same product.</p> <p>23 In essence, to reduce the cost because there</p> <p>24 was -- it was a replicated listing.</p> <p>25 Q And NIBCO had the option to pick which</p>	<p style="text-align: right;">Page 40</p> <p>1 product would not be certified by NSF?</p> <p>2 A I don't remember. I just don't remember.</p> <p>3 Q Do you remember any conversations within NIBCO</p> <p>4 about concerns of losing certification of PEX</p> <p>5 products?</p> <p>6 A I don't remember specifically anything. I think</p> <p>7 there was -- I think, you know, Jana was</p> <p>8 promoting, like, you know, that -- NSF -- there</p> <p>9 was just a -- they -- they -- I believe they</p> <p>10 just had a general fear of NSF to begin with,</p> <p>11 right, so --</p> <p>12 Q Now, could you -- do you have an understanding</p> <p>13 as to why NIBCO looked to NSF -- I'm sorry --</p> <p>14 looked to Jana to assist with its determinations</p> <p>15 of certifications?</p> <p>16 A Can you say that one more time?</p> <p>17 Q In other words, I'm just trying to understand</p> <p>18 NIBCO's view of Jana as to why it looks to Jana</p> <p>19 for guidance on how to do certifications?</p> <p>20 A I don't remember specifically. It may have been</p> <p>21 that we were still relatively new to the PEX</p> <p>22 business, right, and that they had been around</p> <p>23 for longer, had been involved in PEX business.</p> <p>24 Q Did anybody say that to you?</p> <p>25 A I don't remember specifically, no.</p>
<p style="text-align: right;">Page 39</p> <p>1 certification agency it would use for its</p> <p>2 products; is that right?</p> <p>3 A I believe so.</p> <p>4 Q And I think you mentioned that then NIBCO re- --</p> <p>5 or NIBCO's PEX product was reapplied -- or</p> <p>6 reapplied to be certified by IAPMO at some</p> <p>7 point, right?</p> <p>8 A I believe so.</p> <p>9 Q Okay. And why was that?</p> <p>10 A I believe that was a recommendation from Jana.</p> <p>11 Q Okay. And did they say why?</p> <p>12 A I don't remember specifically. I believe that</p> <p>13 they were -- I believe at the point in time that</p> <p>14 they were concerned about NSF and how NSF was</p> <p>15 changing.</p> <p>16 Q When you say they were concerned about NSF</p> <p>17 because NSF was changing, what do you mean by</p> <p>18 that?</p> <p>19 A I believe it was Jana's belief at the time that</p> <p>20 NSF was going to start doing their own testing</p> <p>21 versus doing the testing at Jana, and they were</p> <p>22 going to -- I don't know -- or I don't remember</p> <p>23 specifically, but I just remember Jana being</p> <p>24 concerned about NSF and maybe their policies.</p> <p>25 Q Did Jana ever express concern that NIBCO's PEX</p>	<p style="text-align: right;">Page 41</p> <p>1 Q Okay. Did anybody ever -- was there ever a</p> <p>2 discussion about why NIBCO elected to use Jana</p> <p>3 in its reformulation project?</p> <p>4 A No, not that I remember.</p> <p>5 Q Okay. Whose decision was it to incorporate Jana</p> <p>6 into the reformulation team for NIBCO?</p> <p>7 A I don't remember.</p> <p>8 Q Was that a decision that had already been made</p> <p>9 when you arrived?</p> <p>10 A I'm not sure.</p> <p>11 (Exhibit No. 80 was marked for</p> <p>12 identification.)</p> <p>13 BY MR. DEUTSCH:</p> <p>14 Q I would like you to take a look at what we have</p> <p>15 marked as Meadow 80, which is a document on the</p> <p>16 first page that reads "NIBCO PEX Development</p> <p>17 Program Compilation Report." It encompasses</p> <p>18 Bates number NIBCO Meadow 133858 through 134121.</p> <p>19 On the front page it's listed as Project</p> <p>20 08-1136.</p> <p>21 I would like you to take a look at this</p> <p>22 document and tell me if you recognize it.</p> <p>23 A I believe so.</p> <p>24 Q Okay. And what do you understand this document</p> <p>25 to be?</p>

<p style="text-align: right;">Page 42</p> <p>1 A I don't remember exactly everything that's in</p> <p>2 it.</p> <p>3 Q This was a document produced by Jana?</p> <p>4 A I believe so.</p> <p>5 Q I take it you received this report while you</p> <p>6 were working at NIBCO, right?</p> <p>7 A I believe so.</p> <p>8 Q Okay. And we're going to take a look at various</p> <p>9 parts of this document.</p> <p>10 Does looking at this in any way refresh</p> <p>11 your memory as to who initiated the NIBCO</p> <p>12 reformulation and related projects?</p> <p>13 A No. I don't remember exactly who initiated</p> <p>14 them.</p> <p>15 Q Okay. All right. Well, if we turn to the</p> <p>16 second page of the document, it describes the</p> <p>17 project scope here and it says, "The project</p> <p>18 scope was to support NIBCO in its development</p> <p>19 effort in the selection and detailing of the</p> <p>20 optimal path of the development of an improved</p> <p>21 PEX resin while maintaining the existing</p> <p>22 listings through the development process."</p> <p>23 So would you agree that was the project</p> <p>24 scope of the PEX development project?</p> <p>25 A I believe so.</p>	<p style="text-align: right;">Page 44</p> <p>1 Q By the way, when you say "barrier pipe," could</p> <p>2 you explain what that is?</p> <p>3 A Barrier tubing is typically a PEX tubing with a</p> <p>4 -- that contains a -- or has an exterior coating</p> <p>5 on it to help with the reduction of a permeation</p> <p>6 of oxygen into the water that's flowing inside</p> <p>7 the tubing.</p> <p>8 Q Would that describe NIBCO's PEXc tubing?</p> <p>9 A It's not a -- not the internal -- well, I'm not</p> <p>10 sure exactly what you're asking there.</p> <p>11 Q Okay. I'm just trying to understand what</p> <p>12 barrier pipe is.</p> <p>13 Am I correct in understanding it's a more</p> <p>14 expensive pipe because it, you know, has that</p> <p>15 extra protection than, let's say, compared to</p> <p>16 PEXc?</p> <p>17 A No, it can be PEXc as well.</p> <p>18 Q But is it a design that has more protection</p> <p>19 against degradation?</p> <p>20 A No.</p> <p>21 Q Okay.</p> <p>22 A It is used for -- my understanding is that its</p> <p>23 primary use is for the protection of boilers in</p> <p>24 a closed loop system, right, from that</p> <p>25 standpoint, for a radiant flooring primarily.</p>
<p style="text-align: right;">Page 43</p> <p>1 Q Okay. And then the third page it lists various</p> <p>2 personnel who are listed as the project team.</p> <p>3 Does that conform with your understanding who</p> <p>4 was involved with the PEX development project?</p> <p>5 A I believe so.</p> <p>6 Q Now, if we turn to -- I'm going to be referring</p> <p>7 to the Bates number here (indicating), the one</p> <p>8 in the lower right-hand corner, 133865, that at</p> <p>9 the top says "Project Deliverables."</p> <p>10 MR. BRADSHAW: Right there (indicating).</p> <p>11 BY MR. DEUTSCH:</p> <p>12 Q Okay. Do you recognize and do you agree those</p> <p>13 were the project deliverables, the five items?</p> <p>14 A I believe it may have been initially.</p> <p>15 Q But you think those changed over time?</p> <p>16 A I believe so.</p> <p>17 Q And how did they change?</p> <p>18 A Well, I don't believe that we moved forward with</p> <p>19 a PEXb pipe greater than the one inch, and I</p> <p>20 don't believe that we moved forward with barrier</p> <p>21 pipe to be brought in-house, and I don't believe</p> <p>22 that we actually -- I think we evaluated, but I</p> <p>23 don't think we did anything relative to</p> <p>24 reduction in long-term E-beam costs. I might be</p> <p>25 wrong.</p>	<p style="text-align: right;">Page 45</p> <p>1 Q When you said item five here on deliverables,</p> <p>2 reduction of long-term E-beam costs, do you have</p> <p>3 an understanding of what the approximate annual</p> <p>4 cost of the E-beam process was for NIBCO of its</p> <p>5 PEX business?</p> <p>6 A I don't remember off the top of my head.</p> <p>7 Q Now, in this same page it has criteria for</p> <p>8 success, and under number 3, pipe features, it</p> <p>9 has an item, low coil set. What is that?</p> <p>10 A I'm not sure if I remember correctly, but I</p> <p>11 believe that it's referring to whenever you -- a</p> <p>12 coil that's uncoiled, it doesn't want to coil</p> <p>13 back up again, right, or to some extent, right?</p> <p>14 Q Okay. And was that a feature of NIBCO's 1006</p> <p>15 piping?</p> <p>16 A I don't know.</p> <p>17 Q Okay. Do you know if that was achieved for the</p> <p>18 3308 piping?</p> <p>19 A I don't know.</p> <p>20 Q Now, at the bottom of the page it has the term</p> <p>21 "EVOH barrier." What is that?</p> <p>22 A That is the barrier that is placed on a -- for</p> <p>23 barrier tubing.</p> <p>24 Q I'm sorry, say that again?</p> <p>25 A It is the barrier that is barrier tubing.</p>

<p style="text-align: right;">Page 46</p> <p>1 Q Okay. Do you know what "EVOH" stands for?</p> <p>2 A Ethyl vinyl-something.</p> <p>3 Q Okay.</p> <p>4 A Too many syllables.</p> <p>5 Q What's that?</p> <p>6 A There's too many syllables.</p> <p>7 Q Okay. That's fine. A lot of acronyms.</p> <p>8 Well, if you could turn to Bates number</p> <p>9 133877, which turns out I guess to be also page</p> <p>10 20 of the 261 pages of this Jana report. Take a</p> <p>11 look at that. The title of the page is</p> <p>12 "Improvement of E-beam Process."</p> <p>13 And within that page, as a subsection on</p> <p>14 deliverables, it lists three deliverables. The</p> <p>15 second one says, "An E-beam process that</p> <p>16 cross-links the pipe uniformly around its</p> <p>17 circumference."</p> <p>18 Was the reason for that deliverables that</p> <p>19 was a issue or concern with the current E-beam</p> <p>20 process with the 1006 pipe at this point in</p> <p>21 time?</p> <p>22 A No, I don't believe so.</p> <p>23 Q Do you know why that was being added as a -- or</p> <p>24 being put as a deliverable in this February 2009</p> <p>25 Jana document?</p>	<p style="text-align: right;">Page 48</p> <p>1 Do you know who that -- who was given that</p> <p>2 assignment?</p> <p>3 A I don't remember. I'm not sure that we did</p> <p>4 that, quite honestly.</p> <p>5 Q How about to this day, is there somebody that</p> <p>6 sort of leads the technology for NIBCO with its</p> <p>7 use of the E-beam process?</p> <p>8 A It would -- well, relative to the PEX tubing,</p> <p>9 Earl Sexton is our product engineer that</p> <p>10 supports that product line.</p> <p>11 Q So you think he'd be the person most</p> <p>12 knowledgeable on the E-beam process for NIBCO's</p> <p>13 tubing?</p> <p>14 A I'm not going to say most knowledgeable; I'm</p> <p>15 going to say that he's our engineer that</p> <p>16 supports the PEX tubing line.</p> <p>17 Q Now, was Mr. Sexton a direct report to you?</p> <p>18 A Yes.</p> <p>19 Q Okay. Once you took on your new position in</p> <p>20 2011?</p> <p>21 A Yes.</p> <p>22 Q Okay. I'd like you to take a look, again,</p> <p>23 within this Meadow Exhibit No. 80, Bates number</p> <p>24 133892, which is the 35th of the 261 pages of</p> <p>25 this report by Jana, and the title of this page</p>
<p style="text-align: right;">Page 47</p> <p>1 A I don't remember specifically. I believe Jana</p> <p>2 had some theories about the E-beam process and</p> <p>3 wanted to study it.</p> <p>4 Q Okay. What were their theories of the E-beam</p> <p>5 process, as you understand it?</p> <p>6 A I don't remember.</p> <p>7 Q Now, is there somebody at NIBCO who's -- a</p> <p>8 person with the most expertise about the use and</p> <p>9 impact of E-beam process?</p> <p>10 A I wouldn't -- I don't know who would be most</p> <p>11 knowledgeable.</p> <p>12 Q It wouldn't be somebody that reported directly</p> <p>13 to you?</p> <p>14 A I don't know off the top of my head who would be</p> <p>15 the most knowledgeable.</p> <p>16 Q Now, the deliverable No. 3, it also says, "An</p> <p>17 E-beam process that cross-links the pipe evenly</p> <p>18 along the entire length of coil."</p> <p>19 Now, was there ever a concern that</p> <p>20 cross-linking was not occurring evenly along the</p> <p>21 entire length of the coil with the 1006 piping?</p> <p>22 A Not that I remember.</p> <p>23 Q And down the page, just to touch on what we just</p> <p>24 discussed, it says, "NIBCO will assign full-time</p> <p>25 engineer to become an E-beam expert."</p>	<p style="text-align: right;">Page 49</p> <p>1 is "Phase Two Proposal for NIBCO PEX Resin</p> <p>2 Development."</p> <p>3 Within that, in the third paragraph, it</p> <p>4 says, "There is a clear opportunity to improve</p> <p>5 the quality and performance of the current PEX</p> <p>6 offering."</p> <p>7 Then it goes on to -- continues on where it</p> <p>8 says -- it lists criteria and then it says,</p> <p>9 "NIBCO has decided to improve its offering to</p> <p>10 meet the listed criteria."</p> <p>11 Now, these criteria listed here, are these</p> <p>12 the ones that are the basis for why NIBCO was</p> <p>13 reformulating its product?</p> <p>14 A No. I believe the basis for the reformulated</p> <p>15 product was that it was due to NIBCO wanting to</p> <p>16 grow its market share and to offer a higher</p> <p>17 classification product.</p> <p>18 Q And by "higher classification," you mean one</p> <p>19 that's more chlorine resistant; is that right?</p> <p>20 A No, I mean one that is more -- that has a higher</p> <p>21 classification level.</p> <p>22 Q Okay. Classification as to what criteria?</p> <p>23 A As to the -- as to the certification level</p> <p>24 provided by the agency.</p> <p>25 Q Could you explain that, like, when you say</p>

<p style="text-align: right;">Page 50</p> <p>1 "classification level," what --</p> <p>2 A Instead of it being a 1006 classified product,</p> <p>3 it could be a -- the request was to have a 3 --</p> <p>4 level 3 classified product.</p> <p>5 Q Okay. And by "3," you mean -- doesn't that</p> <p>6 refer to chlorine resistance?</p> <p>7 A It refers to the classification that's been</p> <p>8 assigned to it by the agency. Or the</p> <p>9 certification agency.</p> <p>10 Q Okay. And that classification indicates what to</p> <p>11 the consumer of the product?</p> <p>12 A I am not sure what it indicates to the consumer.</p> <p>13 Q Or somebody buying the product from NIBCO?</p> <p>14 A Well, I mean, it means that it is at a higher</p> <p>15 classification level.</p> <p>16 Q Okay. I would like you to turn to Bates number</p> <p>17 133895, which is the 38th of the 261-page</p> <p>18 report by Jana.</p> <p>19 The top of this page is entitled "Item A,</p> <p>20 Maintain Listings Throughout Development." Do</p> <p>21 you know what that refers to?</p> <p>22 A Maintain -- to what refers to?</p> <p>23 Q I'm sorry. The title at the top of this page,</p> <p>24 133895, that says "Item A, Maintain Listings</p> <p>25 Throughout Development" --</p>	<p style="text-align: right;">Page 52</p> <p>1 improved to the degree that they no longer</p> <p>2 threaten NIBCO certification."</p> <p>3 A Okay. Are you asking what a DLT is?</p> <p>4 Q Okay. What's a DLT?</p> <p>5 A Dependent listing.</p> <p>6 Q Okay. And what is that?</p> <p>7 A It is -- I believe that it is a product listing</p> <p>8 for, like, a parent/child relationship between</p> <p>9 different products, that the general basis of</p> <p>10 the formulation is the same.</p> <p>11 Q Okay. And how did that apply to NIBCO's</p> <p>12 products here?</p> <p>13 A Well, typically, you have one product that has</p> <p>14 an independent listing and then the additional</p> <p>15 colors have a dependent listing.</p> <p>16 Q Okay. And how did that apply here specifically</p> <p>17 to NIBCO in terms of its certifications?</p> <p>18 A Well, we have -- or NIBCO had a independent</p> <p>19 listing for one of the colors and dependent</p> <p>20 listings for the additional colors.</p> <p>21 Q Okay. And what was the color that it had an</p> <p>22 independent listing for?</p> <p>23 A I don't remember off the top of my head.</p> <p>24 Q Okay. And could you explain how that process</p> <p>25 works? So if you have an independent listing,</p>
<p style="text-align: right;">Page 51</p> <p>1 A Yes.</p> <p>2 Q -- do you have an understanding what that refers</p> <p>3 to?</p> <p>4 A I believe so.</p> <p>5 Q Okay. And what is that?</p> <p>6 A It meant that they would assist while we develop</p> <p>7 the reformulation product or while the product</p> <p>8 was being reformulated that -- to have a --</p> <p>9 always have the product listed, the current</p> <p>10 product.</p> <p>11 Q Okay. And within this page it has deliverables,</p> <p>12 and so No. 2 says, "DLT requirements are</p> <p>13 improved to the degree that they no longer</p> <p>14 threaten NIBCO's certification."</p> <p>15 Now, what does that refer to?</p> <p>16 A Does what refer to?</p> <p>17 Q I'm sorry. You have these deliverables in this</p> <p>18 Jana report that's shared with NIBCO, and so</p> <p>19 under this item of "Maintain Listings Throughout</p> <p>20 the Development," it has deliverables, and I'm</p> <p>21 looking at No. 2 of the deliverables and I'm</p> <p>22 just asking you, could you explain what that's</p> <p>23 referring to?</p> <p>24 A To which specific deliverable?</p> <p>25 Q I'm sorry. No. 2, "DLT requirements are</p>	<p style="text-align: right;">Page 53</p> <p>1 how did they then give you certification for the</p> <p>2 dependent listings?</p> <p>3 A Well, I can't tell -- I'm not a subject matter</p> <p>4 expert. So I can tell you my basic</p> <p>5 understanding.</p> <p>6 Q Okay, fair enough.</p> <p>7 A Is that, in essence, that you have an</p> <p>8 independent product -- or a tubing that is</p> <p>9 tested, right, by the agency to the test</p> <p>10 requirements, and that the listing is that, and</p> <p>11 then I believe that there's a reduced number of</p> <p>12 samples that are tested and that the data is</p> <p>13 combined with the original data in order to say</p> <p>14 that basically that there's not a significant</p> <p>15 difference in the product and so, therefore, the</p> <p>16 dependent listing is given.</p> <p>17 Q Now, is that a common approach that NIBCO would</p> <p>18 have with its products; in other words, an</p> <p>19 independent listing and the related product</p> <p>20 having a dependent listing?</p> <p>21 A I'm not sure exactly what products -- are you --</p> <p>22 what products are you talking about?</p> <p>23 Q I guess I'm talking more broadly now. Like,</p> <p>24 NIBCO gets a wide range of its products</p> <p>25 certified, right, not just PEX, right?</p>

<p style="text-align: right;">Page 54</p> <p>1 A Sure.</p> <p>2 Q So in its non-PEX business, are there lots of</p> <p>3 instances where it gets an independent and a</p> <p>4 dependent listing?</p> <p>5 A There are a multitude of agencies, their</p> <p>6 policies and the standards by which the products</p> <p>7 are approved by. I think trying to characterize</p> <p>8 one and say that something is more common than</p> <p>9 another, I don't -- I guess I wouldn't do that.</p> <p>10 Q Okay. How about in the products that were</p> <p>11 competitive to NIBCO's PEXc products, are you</p> <p>12 aware of if your competitors had certifications</p> <p>13 that incorporated independent listings coupled</p> <p>14 with dependent listings?</p> <p>15 A The standard for PEX offers that availability.</p> <p>16 I believe that's their choice and their decision</p> <p>17 at that point in time. I have no idea what they</p> <p>18 do.</p> <p>19 Q And you're saying the choice, meaning the</p> <p>20 manufacturer or the certification body?</p> <p>21 A I believe probably both, right? I don't know</p> <p>22 for sure.</p> <p>23 Q Okay. All right. Well, if we could take a</p> <p>24 look -- again, at the same page, 133895 of</p> <p>25 Meadow 80 -- you have an item A1 on this that</p>	<p style="text-align: right;">Page 56</p> <p>1 Jana?</p> <p>2 A Not any specific details, right? They -- that</p> <p>3 was their proposal, I believe, and it went</p> <p>4 through the ASTM process.</p> <p>5 Q Okay. Did they -- is it your understanding</p> <p>6 they, Jana, was taking this initiative based</p> <p>7 upon their examination of NIBCO's certification</p> <p>8 concerns?</p> <p>9 A Not that I'm aware of.</p> <p>10 Q Okay. So I guess you're referring to -- and</p> <p>11 this item A1, below the paragraph we were just</p> <p>12 looking at, it says, "Jana will develop the</p> <p>13 alternative criteria and manage the balloting</p> <p>14 process for," and then it refers to ASTM 2023,</p> <p>15 F876. That's what you're referring to?</p> <p>16 A I believe so.</p> <p>17 Q That they were actually trying to change the</p> <p>18 standard at that point in time. And that</p> <p>19 would've been beneficial to NIBCO seeking its</p> <p>20 certification, right?</p> <p>21 A I believe that they believe that there were</p> <p>22 problems in the standard in and of itself, and</p> <p>23 they wanted to address those problems. So I</p> <p>24 think it would've benefited basically anyone,</p> <p>25 right, because there were just problems in the</p>
<p style="text-align: right;">Page 55</p> <p>1 says "Defense Plan," and then item A1.1 says</p> <p>2 "Change DLT Requirements."</p> <p>3 Do you know what this plan refers to here?</p> <p>4 A Only as it's written there, right. I don't</p> <p>5 remember the specifics, everything about it, no.</p> <p>6 Q Okay. Because it says, "Jana will provide</p> <p>7 engineering consulting services to develop a new</p> <p>8 chlorine dependent listing transfer (DLT)</p> <p>9 requirement and to change the current DLT</p> <p>10 criteria in order to facilitate the maintenance</p> <p>11 of the current listing and obtainment of future</p> <p>12 listings."</p> <p>13 So am I correct in understanding, like,</p> <p>14 Jana was actually trying to get the</p> <p>15 certification agency to change how they did the</p> <p>16 dependent listing?</p> <p>17 A No, I don't believe so.</p> <p>18 Q Okay.</p> <p>19 A I believe that they were trying to change ASTM</p> <p>20 F2023 and ASTM F876 because they believed that</p> <p>21 there was something in those standards that</p> <p>22 shouldn't have been there.</p> <p>23 Q Okay. And what specifically?</p> <p>24 A I don't remember specifically.</p> <p>25 Q Do you remember any discussions about this with</p>	<p style="text-align: right;">Page 57</p> <p>1 standard.</p> <p>2 Q If you turn to the next page, which is 133896 of</p> <p>3 Meadow Exhibit 80, and again, it's under --</p> <p>4 there's a topic "Assumptions" which, again, is</p> <p>5 continuing with listing with alternative</p> <p>6 agencies, and the first two bullet points -- one</p> <p>7 reads, under "Assumptions," "Change of the DLT</p> <p>8 requirements in NSF 14 will take 6 to 12</p> <p>9 months."</p> <p>10 You see that, right?</p> <p>11 A Uh-huh.</p> <p>12 Q Did that happen?</p> <p>13 A Did what happen?</p> <p>14 Q Well, what they're -- they're saying a change of</p> <p>15 the DLT requirements in NSF 14.</p> <p>16 A There were changes to the standards going on at</p> <p>17 that time, and I don't remember the specifics on</p> <p>18 it.</p> <p>19 Q Okay. How about the next bullet point where</p> <p>20 they say, "Addition of the DLT requirements in</p> <p>21 ASTM F2023 or ASTM F876 will take 12 to 24</p> <p>22 months," do you know if that happened?</p> <p>23 A I know -- like I said, I know there were changes</p> <p>24 to the standard; I don't remember the specifics.</p> <p>25 Q Okay. If you could turn -- again, we're still</p>

<p style="text-align: right;">Page 58</p> <p>1 in Meadow 80 -- and turn to page 133899, which</p> <p>2 is the 42nd page of this report, and this</p> <p>3 topic is under item C, "Improvement of E-beam</p> <p>4 Process."</p> <p>5 At this point in time, this is in 2009,</p> <p>6 early in 2009, that was one of the goals of the</p> <p>7 projects with Jana for NIBCO's PEX product,</p> <p>8 right?</p> <p>9 A I'm sorry, say that one more time.</p> <p>10 Q I'm sorry. This document has a number of goals</p> <p>11 that were set forth, and one of them appears to</p> <p>12 be improvement of the E-beam process; would you</p> <p>13 agree with that?</p> <p>14 A I would -- at that point in time, that's how</p> <p>15 it's titled, yes.</p> <p>16 Q Okay. And within this -- again, on this page,</p> <p>17 it says rationale. This is for the improvement</p> <p>18 of E-beam process. In the first paragraph it</p> <p>19 reads, "The E-beam process has been identified</p> <p>20 as an opportunity to improve the quality of the</p> <p>21 overall product."</p> <p>22 Now, what's your understanding of the basis</p> <p>23 for making that statement, that's an</p> <p>24 opportunity, really, here to improve the</p> <p>25 product?</p>	<p style="text-align: right;">Page 60</p> <p>1 efforts done by NIBCO and Jana as to how the</p> <p>2 E-beam process worked or how it could be</p> <p>3 improved?</p> <p>4 A I believe we -- I believe that we under- -- you</p> <p>5 know, I can't remember the specific actions that</p> <p>6 were done as a result of it. For the most part,</p> <p>7 I believe that the E-beam process today is</p> <p>8 essentially the same as what it started from.</p> <p>9 Q If you could turn to Bates number 133905 within</p> <p>10 this Meadow Exhibit 80, which is the 48th page</p> <p>11 of this 261-page document?</p> <p>12 MR. BRADSHAW: Would this be a good time to</p> <p>13 take a short break?</p> <p>14 MR. DEUTSCH: Sure, absolutely.</p> <p>15 (A recess was taken from 9:30 a.m. to</p> <p>16 9:41 a.m.)</p> <p>17 BY MR. DEUTSCH:</p> <p>18 Q Speaking of Scott Perry, I just want to go on a</p> <p>19 slightly different topic. Now, he reported to</p> <p>20 you in your current role, right?</p> <p>21 A He does report to me.</p> <p>22 Q He reports to you.</p> <p>23 So did his duties and responsibilities</p> <p>24 change during your tenure of being his</p> <p>25 supervisor?</p>
<p style="text-align: right;">Page 59</p> <p>1 A I think that they had some theories that</p> <p>2 after -- I think that after we wound up studying</p> <p>3 it, it was not really necessarily so.</p> <p>4 Q Okay. You mean subsequent to this report --</p> <p>5 A Uh-huh.</p> <p>6 Q -- in January -- in February of 2008?</p> <p>7 A I believe so. I mean, I believe so. I can't</p> <p>8 remember specifically.</p> <p>9 Q Okay. Do you remember any of, you know, how you</p> <p>10 reached that conclusion, that perhaps the E-beam</p> <p>11 initiative was not really worth doing?</p> <p>12 A Well, I believe that we took -- undertook the</p> <p>13 E-beam initiative is really more of a -- really</p> <p>14 kind of to further our own internal knowledge of</p> <p>15 what the E-beam process does, how it works, and</p> <p>16 how it interacts with the tubing.</p> <p>17 Q Okay. And what steps were taken to better</p> <p>18 understand the E-beam process and apply it to</p> <p>19 NIBCO's PEX products?</p> <p>20 A I don't remember specifically. I do remember</p> <p>21 that we ran several trials with different types</p> <p>22 of configurations of how the tubing processes</p> <p>23 through the E-beam and then trying to understand</p> <p>24 what the output of that was.</p> <p>25 Q And was there any conclusions reached from the</p>	<p style="text-align: right;">Page 61</p> <p>1 A Yes.</p> <p>2 Q Okay. And did he -- well, how did his duties</p> <p>3 and responsibilities change?</p> <p>4 A Well, at some point we started to separate new</p> <p>5 product development from maintenance of mature</p> <p>6 product, and as a result of that, Scott focused</p> <p>7 more on the mature product side versus the</p> <p>8 advanced quality group focusing more on the new</p> <p>9 product side.</p> <p>10 Q And why did you make that change?</p> <p>11 A It was more efficient from a resource allocation</p> <p>12 so that we could force allocate resources to</p> <p>13 supporting new product development versus</p> <p>14 working through the mature product items.</p> <p>15 Q Was the decision to change his role at all</p> <p>16 driven by an increased flow or concerns of</p> <p>17 product that had already been sold into the</p> <p>18 marketplace?</p> <p>19 A No.</p> <p>20 Q No, okay. Now, again, just to jump to some</p> <p>21 topics we talked about before.</p> <p>22 On the new product committee, were there</p> <p>23 written reports that were submitted to the</p> <p>24 committee and then that the committee issued,</p> <p>25 you know, based on which new products it was</p>

<p style="text-align: right;">Page 62</p> <p>1 evaluating or approving?</p> <p>2 A I'm not sure I'm following what you're asking.</p> <p>3 Q I'm just trying to find out, is there a written</p> <p>4 record of what gets submitted to the new product</p> <p>5 committee and then what the new product</p> <p>6 committee's decisions are?</p> <p>7 A I'm not sure specifically on that.</p> <p>8 Q You haven't seen such documents?</p> <p>9 A I'm not -- yeah, I'm not sure exactly -- I</p> <p>10 understand exactly what you're asking there,</p> <p>11 right? I mean, as far as reports, no, right?</p> <p>12 There might be presentations that may have been</p> <p>13 made, but no.</p> <p>14 Q So normally there would be like a presentation</p> <p>15 made to the committee about the new product; is</p> <p>16 that right?</p> <p>17 A For the tollgate. There will be tollgate</p> <p>18 presentations.</p> <p>19 Q And then is there write-up -- if the new product</p> <p>20 committee says we're going to proceed with that</p> <p>21 product, do they write -- do they or somebody</p> <p>22 write an analysis that they're approving?</p> <p>23 A I would not characterize it as an analysis.</p> <p>24 Q Okay. Or at least a sign-off to say, go ahead</p> <p>25 with the new product?</p>	<p style="text-align: right;">Page 64</p> <p>1 Q And does NIBCO currently manufacture PEXb?</p> <p>2 A No, not that I'm aware of.</p> <p>3 Q Okay. And why doesn't it?</p> <p>4 A I'm not sure exactly.</p> <p>5 Q And what was the reason for NIBCO to produce or</p> <p>6 sell PEXb as opposed to just selling PEXc</p> <p>7 product?</p> <p>8 A I'm not sure 100 percent on it.</p> <p>9 Q Okay.</p> <p>10 A As far as, you know, why a PEXc versus PEXb.</p> <p>11 Q Is there some advantage to PEXb versus PEXc or</p> <p>12 vice versa?</p> <p>13 A Not necessarily, no, not in my opinion.</p> <p>14 Q Okay. So you're not aware of any reason why</p> <p>15 NIBCO would sell B even though it's selling C?</p> <p>16 A Not -- I mean, not off the top of my head,</p> <p>17 right.</p> <p>18 Q Turning back to Meadow 80, No. 80, and maybe</p> <p>19 taking you back slightly, but to page 133896.</p> <p>20 And this is, again, "Listing with Alternative</p> <p>21 Agencies" is the topic, and then under</p> <p>22 "Assumptions," there's a third bullet point that</p> <p>23 I wanted to focus you on.</p> <p>24 And that one says, "All activity in this</p> <p>25 area will be suspended once a positive and</p>
<p style="text-align: right;">Page 63</p> <p>1 A There's typically a sign-off, yes.</p> <p>2 Q Okay. And there's a written record of that,</p> <p>3 right?</p> <p>4 A It may be electronic.</p> <p>5 Q Okay. Now, we touched on the idea of NIBCO</p> <p>6 making PEXb products.</p> <p>7 Did NIBCO ever develop a PEXb product for</p> <p>8 something smaller than one inch?</p> <p>9 A I'm not sure what you're asking.</p> <p>10 Q Okay. Well, let's make it broader.</p> <p>11 Has NIBCO ever developed or sold PEXb</p> <p>12 product?</p> <p>13 A Yes.</p> <p>14 Q Okay. And what product has it sold or does it</p> <p>15 sell?</p> <p>16 A It has sold -- NIBCO has sold PEXb tubing.</p> <p>17 Q And what -- could you describe the products that</p> <p>18 are PEXb as opposed to the PEXc line that it</p> <p>19 sells?</p> <p>20 A It's PEXb tubing versus PEXc tubing.</p> <p>21 Q Okay. Same diameters?</p> <p>22 A I believe so.</p> <p>23 Q Okay. And it buys the PEXb and resells it?</p> <p>24 A We have purchased PEXb and resold it, and we</p> <p>25 have manufactured PEXb.</p>	<p style="text-align: right;">Page 65</p> <p>1 sustainable position has been achieved by NIBCO</p> <p>2 PEX product family in relation to these</p> <p>3 requirements."</p> <p>4 Do you see that?</p> <p>5 A I'm sorry, I just got to the page.</p> <p>6 Q Oh, sorry. So under "Assumptions," it's the</p> <p>7 third bullet point down that I just read, if you</p> <p>8 could focus on that.</p> <p>9 A Okay.</p> <p>10 Q Okay. So is it your understanding that this</p> <p>11 assumption actually occurred so that NIBCO had</p> <p>12 its certification and, therefore, Jana was not</p> <p>13 going to continue with trying to change the DLT</p> <p>14 requirements?</p> <p>15 A I don't believe so.</p> <p>16 Q I'm sorry, you don't believe that they suspended</p> <p>17 their efforts?</p> <p>18 A No, I don't believe so.</p> <p>19 Q You think that Jana continued to change the</p> <p>20 requirements?</p> <p>21 A I believe the requirements were -- I believe the</p> <p>22 standards were changed or modified.</p> <p>23 Q Along the lines that Jana proposed?</p> <p>24 A I believe so.</p> <p>25 Q If you could turn to Bates number 133905, which</p>

<p style="text-align: right;">Page 66</p> <p>1 is titled at the top, "Project Risks And 2 Opportunities." Under this area of risks, it is 3 an item in this chart that it has where it says, 4 "Early NSF grab sample of existing product." 5 Then it says, "Risk loss of certification." 6 Then it says, "Impact inability to sell product. 7 Damage to reputation." 8 Now, do you know what that refers to? 9 A Which aspect of it? 10 Q I'm sorry. The third -- it's really the third 11 item here, "Early NSF grab sample of existing 12 product." 13 What was the concern stated here in this 14 report produced by Jana for NIBCO? What are 15 they focused on? 16 A I'm not sure what they were referring to there 17 as far as -- I mean, it's just -- I think it 18 says exactly what it says there, right, early 19 NSF grab. 20 Q Okay. There was a concern that NSF would come 21 in on an unannounced audit and test some of the 22 NIBCO pipe that there was concerns that it 23 probably wouldn't pass certification levels? 24 A No, I wouldn't say that. 25 Q Were there ever any concerns about that</p>	<p style="text-align: right;">Page 68</p> <p>1 Now, were you interviewed by Jana? 2 A I don't remember being. 3 Q Were you involved in helping to organize 4 interviews for Jana? 5 A Just to coordinate, I believe, times, peoples, 6 and places schedule-wise. 7 Q Do you have an understanding what the purpose of 8 the interviews was? 9 A I don't remember specifically about it. 10 Q Okay. I would like to draw your attention -- 11 this is the part of this Meadow 80 that refers 12 to interviews, which begins on 133920. 13 And specifically within that section I want 14 to draw your attention to the next page, 133921. 15 There's a section here, "Jana Comments," which I 16 would understand as being drawn from their 17 interviews. 18 So in the second point under "Jana 19 Comments," under "Extrusion," it says, 20 "Pinholing has been observed in larger diameter 21 pipe as a result of oxidized material sloughing 22 off from the extruder/die and affecting the 23 E-beam process." 24 Do you know what that is based upon? 25 A No, I don't remember.</p>
<p style="text-align: right;">Page 67</p> <p>1 happening? Did anybody express that to you? 2 A Like I said, what I remember was Jana being just 3 concerned about NSF in general. 4 Q But in their role as doing this work for NIBCO, 5 did they not come up with some strategies of how 6 to avoid decertification from NSF? 7 A I'm not sure I remember things specifically like 8 that, right? You know, I believe they had some 9 strategies on how to -- you know, just how to 10 maintain the listing and things that they were 11 recommending, right, but I don't remember 12 specifically anything to avoid. I'm not sure 13 I'm following the words that you're saying. 14 Q Okay. What's the term "TD" refer to? 15 A I'm sorry? 16 Q "TD"? 17 A Where are we? 18 Q I'll show you where it is. On page 133906 -- 19 really the next page over -- it has this chart 20 of opportunities and then it says, "Early 21 preliminary certification based on TD listing." 22 What is that? 23 A I don't remember. 24 Q Okay. Now, within this document, Meadow 80, it 25 incorporates interviews of NIBCO employees.</p>	<p style="text-align: right;">Page 69</p> <p>1 Q It also says down below on the E-beam process, 2 the second point they're making there is, "Based 3 on testing results, it is evident that the 4 E-beam process is consuming a significant part 5 of the stabilization package which affects 6 product quality and consistency. There is some 7 evidence that there is significant variability 8 around and along the pipe inclusion of 9 oxidation" -- I'm sorry -- "along the pipe." 10 That's that point. 11 Now, do you have an understanding of where 12 Jana drew that information from NIBCO? 13 A No, I don't remember. 14 Q Now, at the next point below it, under "E-beam" 15 refers to OIT, and do you know what that is, 16 oxidation induction time? 17 A In general terms, but I'm not an expert. 18 Q Okay. Explain to me your understanding of OIT. 19 A Well, I mean, it's -- I believe that it is a 20 method to measure like how fast the antioxidants 21 are consumed, right. I'm not -- you know, I 22 don't remember specifically, so. 23 Q Okay. Well, here it says, "Inclusion of OIT or 24 similar method as a measure of the residual 25 stabilizers in the pipe as recommended as part</p>

<p style="text-align: right;">Page 70</p> <p>1 of the QC program."</p> <p>2 Is that your understanding of how OIT might</p> <p>3 be used by NIBCO in its PEX products?</p> <p>4 A I'm sorry, say that one more time, because I'm</p> <p>5 not sure I'm following what you're asking.</p> <p>6 Q Okay. Well, I'm focused on that third point in</p> <p>7 the E-beam process.</p> <p>8 And why don't I change that question as to</p> <p>9 how was OIT used by NIBCO in its quality control</p> <p>10 processes?</p> <p>11 A Okay. I'm still -- I'm not following the</p> <p>12 question, right.</p> <p>13 Q Okay. Was the OIT test ever used as a method to</p> <p>14 help NIBCO determine the quality of its PEXc</p> <p>15 tubing?</p> <p>16 A I believe in the reformulation we explored the</p> <p>17 use of OIT, but then because of the significant</p> <p>18 difficulties in trying to correlate the output</p> <p>19 of that to other pipe characteristics that it</p> <p>20 was drawn to.</p> <p>21 Q Okay. Was it ever used as a quality control</p> <p>22 tool for the 1006 tubing sold by NIBCO?</p> <p>23 A Can you clarify what you mean by "quality</p> <p>24 control"?</p> <p>25 Q Well, I'm really referring to what Jana is</p>	<p style="text-align: right;">Page 72</p> <p>1 it has a bullet point that says "QC lab located</p> <p>2 at Lebanon (to be relocated)."</p> <p>3 What's the reason that the quality control</p> <p>4 lab located at Lebanon was relocated?</p> <p>5 A I don't remember anything about that.</p> <p>6 Q Okay. Were you involved in that decision?</p> <p>7 A No.</p> <p>8 Q Do you know who made that decision?</p> <p>9 A No, I don't remember anything about it.</p> <p>10 Q If you could turn to the next page, which is</p> <p>11 133928, and this is all within Meadow 80, the</p> <p>12 interview records developed by Jana from</p> <p>13 interviews with NIBCO personnel.</p> <p>14 And on that page it has a section "QC</p> <p>15 Difficulties," and then it has a bullet point</p> <p>16 that says "Pinholes," and below that it says,</p> <p>17 "They have observed pinholes in large diameter</p> <p>18 pipe, one-and-one-quarter inch pipe," and then</p> <p>19 below that it says, "Thought it was a result of</p> <p>20 overbeaming process."</p> <p>21 Do you know what the underlying information</p> <p>22 given to Jana that served as the basis of this</p> <p>23 conclusion?</p> <p>24 A No, I don't. I don't remember anything about</p> <p>25 that.</p>
<p style="text-align: right;">Page 71</p> <p>1 putting down here, which seems to be drawing</p> <p>2 from the interviews they did of NIBCO personnel,</p> <p>3 that they're recommending it as a part of the</p> <p>4 quality control program.</p> <p>5 A I don't remember exactly what they're referring</p> <p>6 to there as our quality control program.</p> <p>7 Q Okay. If you could turn to 133923 which, again,</p> <p>8 is within Meadow Exhibit 80. This is a section</p> <p>9 of the report that's called "Summary Based on</p> <p>10 Interviews," and then they have a section on</p> <p>11 this page 133923, a formulation history, and it</p> <p>12 has a bullet point, "Original formulation</p> <p>13 developed by Durapipe." And the third bullet</p> <p>14 point says, "Could not pass chlorine requirement</p> <p>15 (UL tested) so moved to Finathene."</p> <p>16 Do you know what that refers to?</p> <p>17 A No, I do not.</p> <p>18 Q Did anybody ever give you a synopsis of what the</p> <p>19 process used by CPI was prior to the acquisition</p> <p>20 of those assets by NIBCO for its PEX business?</p> <p>21 A I don't recall.</p> <p>22 Q Now, if you turn to page 133927. Again, this is</p> <p>23 all within the interview process that Jana</p> <p>24 undertook, and this is their written document of</p> <p>25 it. It has a section called "QC Process," and</p>	<p style="text-align: right;">Page 73</p> <p>1 Q Now, above that on this same page, which is</p> <p>2 actually a category called "QC Process," there's</p> <p>3 a bullet point that says "Post E-beam." And</p> <p>4 then below it there's a bullet point that says,</p> <p>5 "Pressure checked to identify pinholes, and then</p> <p>6 typically every fifth reel, currently every</p> <p>7 reel."</p> <p>8 Do you know what that refers to?</p> <p>9 A The pressure check?</p> <p>10 Q Yes.</p> <p>11 A I believe they were basically doing a pressure</p> <p>12 check on the entire reel.</p> <p>13 Q Okay. Now, below it says, "Typically every</p> <p>14 fifth reel."</p> <p>15 That was the quality control system used by</p> <p>16 NIBCO for its 1006 pipe?</p> <p>17 A I don't know for sure.</p> <p>18 Q Do you have an understanding of the testing done</p> <p>19 of the manufactured 1006 pipe that was done at</p> <p>20 NIBCO's facilities before it shipped its pipe?</p> <p>21 A I don't know all of the checks that were done.</p> <p>22 Q What checks do you know were done?</p> <p>23 A I mean, I don't know specifically what all the</p> <p>24 checks are that they done. Just casual</p> <p>25 conversation. I know that they check certain</p>

<p style="text-align: right;">Page 74</p> <p>1 things, right, I just don't know specifically</p> <p>2 what it is.</p> <p>3 Q Okay. Who at NIBCO would be the person most</p> <p>4 knowledgeable on what quality control checks</p> <p>5 were done on NIBCO's PEXc product before it was</p> <p>6 shipped?</p> <p>7 A Probably somebody up in manufacturing facility.</p> <p>8 Q Names?</p> <p>9 A Probably the best name that I can give you would</p> <p>10 probably be Debbie Premus.</p> <p>11 Q Have you ever talked to Debbie Premus about her</p> <p>12 involvement with this litigation?</p> <p>13 A No.</p> <p>14 Q Or her involvement with any of the PEXc</p> <p>15 litigations?</p> <p>16 A Not that I remember.</p> <p>17 Q Okay. I would like to focus you now -- we're</p> <p>18 still within Meadow 80. Now I want to turn to</p> <p>19 the section about the interview of Chris Mason,</p> <p>20 vice president of supply chain, plant manager,</p> <p>21 interview summary.</p> <p>22 So I'm going to turn to page 133937, and</p> <p>23 there's a box that reads, "How flexible do you</p> <p>24 feel manufacturing is on taking on new materials</p> <p>25 processes?"</p>	<p style="text-align: right;">Page 76</p> <p>1 correctly.</p> <p>2 Q But you don't remember where?</p> <p>3 A No.</p> <p>4 MR. ANDERSON: He's just playing the odds.</p> <p>5 BY MR. DEUTSCH:</p> <p>6 Q Within this report, if you go back a number of</p> <p>7 pages, they list Larry Smallwood as production</p> <p>8 manager in the PEX product.</p> <p>9 What's your understanding of what his role</p> <p>10 was?</p> <p>11 A I believe that he was the production manager.</p> <p>12 Q Did that make him in charge of the plant, or</p> <p>13 what were his duties?</p> <p>14 A I'm not exactly -- I don't know all of his</p> <p>15 duties.</p> <p>16 Q I would like you to turn again within Meadow 80</p> <p>17 to page 133943, and this is within an interview</p> <p>18 section of Randy Doering.</p> <p>19 So in these notes by Jana, it says --</p> <p>20 there's a section, "Liability Returns," and</p> <p>21 within that it says, "90 percent of returns are</p> <p>22 installation-related."</p> <p>23 Do you have any idea what that's based</p> <p>24 upon?</p> <p>25 A No.</p>
<p style="text-align: right;">Page 75</p> <p>1 And there's a bullet point that reads,</p> <p>2 "Extrusion/Manufacturing: Technical knowledge</p> <p>3 is very weak with very limited resources (no</p> <p>4 engineers on staff in Lebanon, extrusion</p> <p>5 operators know how to make pipe, but there's</p> <p>6 limited technical support on site) interviewing</p> <p>7 for new production manager with more technical</p> <p>8 background."</p> <p>9 Do you agree with this analysis that Jana</p> <p>10 is presenting based upon an interview of</p> <p>11 Chris Mason?</p> <p>12 A I believe that they don't have any engineers on</p> <p>13 staff in Lebanon. I can't speak to the level of</p> <p>14 knowledge about the extrusion operators.</p> <p>15 Q Okay. Now, was Larry Smallwood the plant</p> <p>16 manager at the time of this report?</p> <p>17 A I don't believe so.</p> <p>18 Q Okay. He had left by then?</p> <p>19 A I don't believe he was the plant manager.</p> <p>20 Q Okay. Or what was his role?</p> <p>21 A I'm not exactly sure what his title was.</p> <p>22 Q Do you know why he left NIBCO?</p> <p>23 A I believe he retired.</p> <p>24 Q Do you know where he went?</p> <p>25 A Someplace in Florida, I believe. If I remember</p>	<p style="text-align: right;">Page 77</p> <p>1 Q And then it says -- below that there's a bullet</p> <p>2 point that says, "PEX, two problems," and then</p> <p>3 it has two problems. One says "Pinhole leaks on</p> <p>4 larger diameter" and then "Pipe would split."</p> <p>5 Do you have knowledge of those being</p> <p>6 problems with NIBCO's PEX product at this time?</p> <p>7 A Which one?</p> <p>8 Q I'm sorry, I'm on 133943.</p> <p>9 A Okay.</p> <p>10 Q And it says, "PEX tube problems," and then it</p> <p>11 has a bullet point, "Pinhole leaks on larger</p> <p>12 diameter," and then the second one would be,</p> <p>13 "Pipe would split."</p> <p>14 A I don't have any specific knowledge of those.</p> <p>15 Q Did it ever come to your attention of certain</p> <p>16 areas of the country that had significant</p> <p>17 complaints about NIBCO's PEX pipe leaking?</p> <p>18 A Not that I'm really aware of other than, you</p> <p>19 know, like the complaints relative to the -- my</p> <p>20 previous deposition, right. I believe that was</p> <p>21 in the San Antonio area. You know, I'm not</p> <p>22 really aware of anything else.</p> <p>23 Q How was the suit in the San Antonio area, the</p> <p>24 Christianson suit, how was that resolved?</p> <p>25 A I have no idea.</p>

<p style="text-align: right;">Page 78</p> <p>1 Q Now, if you could take a look within this</p> <p>2 document at Bates number 133957. And this is</p> <p>3 within a section called "Key observations of</p> <p>4 VOC".</p> <p>5 And what is "VOC"?</p> <p>6 A I'm sorry?</p> <p>7 Q VOC, as used in --</p> <p>8 A Typically it refers to voice of the customer.</p> <p>9 Q Okay. And what does that involve for NIBCO?</p> <p>10 A Are we looking at this here? I'm trying to get</p> <p>11 to the --</p> <p>12 Q I'm looking at -- I'm sorry, I'm going to draw</p> <p>13 your attention to 133957.</p> <p>14 A Okay.</p> <p>15 Q Which is preceded by -- it appears to be this</p> <p>16 section that focuses on VOC, "Key observations</p> <p>17 from VOC."</p> <p>18 I guess VOC really starts on 133952. It</p> <p>19 describes customer interview breakdown by type,</p> <p>20 and it lists apparently who NIBCO reaches out</p> <p>21 to, to get input on the product; is that fair?</p> <p>22 A Yes.</p> <p>23 Q Okay. So it's a tool to try to understand how</p> <p>24 customers are perceiving NIBCO's product; is</p> <p>25 that right?</p>	<p style="text-align: right;">Page 80</p> <p>1 wanted to draw your attention to 133965, which</p> <p>2 appears to be part of a presentation given, and</p> <p>3 the title of this page is "Current Product." Do</p> <p>4 you see that? And it has pluses is the way I'd</p> <p>5 understand this presentation page. You would</p> <p>6 agree with that?</p> <p>7 A Yes.</p> <p>8 Q And it says -- under "Current Product," it says</p> <p>9 "Flexibility and hold."</p> <p>10 Were those positive characteristics of the</p> <p>11 1006 product?</p> <p>12 A I'm not sure. I believe that's what they are</p> <p>13 saying here.</p> <p>14 Q Okay. Did you have an understanding that that</p> <p>15 was one of the attractions of the 1006 product,</p> <p>16 was that it was flexible?</p> <p>17 A I wouldn't say in general in terms of the 1006</p> <p>18 product. I would say in general PEX in general,</p> <p>19 right, that they would want something that's</p> <p>20 flexible and holds.</p> <p>21 Q Okay. So you can bend it and reach different</p> <p>22 parts of the house when you're putting it in,</p> <p>23 right?</p> <p>24 A Well, I think that's -- some of that is that,</p> <p>25 and I think some of it is the hold portion of it</p>
<p style="text-align: right;">Page 79</p> <p>1 A Not necessarily, right.</p> <p>2 Q Okay.</p> <p>3 A It can be for anything, right. It's not just --</p> <p>4 it can be for -- to identify opportunities for</p> <p>5 new products.</p> <p>6 Q Okay. But it's to get customer feedback, in</p> <p>7 other words?</p> <p>8 A Typically.</p> <p>9 Q Okay. Were you involved with any VOC for PEX</p> <p>10 products?</p> <p>11 A I don't remember, other -- I don't -- yeah, I</p> <p>12 really don't remember.</p> <p>13 Q Okay. I mean at any point for any product of</p> <p>14 NIBCO?</p> <p>15 A Of actual doing interviews of people, no, not</p> <p>16 that I remember. I mean, I've been involved</p> <p>17 from looking at these analysis and participating</p> <p>18 upon the output of the VOC interviews, right,</p> <p>19 product, but not necessarily in the interview</p> <p>20 process.</p> <p>21 Q Okay. All right. Again, continuing with this</p> <p>22 Meadow 80. There's a section here that begins</p> <p>23 on 13359 -- 133959. It's entitled "NIBCO PEX</p> <p>24 resin development."</p> <p>25 So within that subsection of Meadow 80, I</p>	<p style="text-align: right;">Page 81</p> <p>1 is like when you make radiant floor loops, when</p> <p>2 you lay it down, it stays where it's at. It</p> <p>3 doesn't want to coil back up.</p> <p>4 Q Okay. So on the next page, which is 133966,</p> <p>5 this is another part of a presentation</p> <p>6 apparently that -- again, "Current Product," and</p> <p>7 it seems to have the negatives. You would agree</p> <p>8 that that seems to be what it's showing here?</p> <p>9 A Uh-huh.</p> <p>10 Q And the second bullet point here says "Marginal</p> <p>11 pass on chlorine resistance."</p> <p>12 Would you agree that that was an issue of</p> <p>13 the 1006 product, right?</p> <p>14 A I'm not sure it's an issue; I would say it was</p> <p>15 just where it was at relative to the standard.</p> <p>16 Q Okay. It marginally passed, right?</p> <p>17 A I'm not sure, right? I don't know what</p> <p>18 "marginal" really means in this sense.</p> <p>19 Q Okay. And then the next bullet point regarding</p> <p>20 the current product is that it's "AO package not</p> <p>21 chlorine friendly."</p> <p>22 What's your understanding of what that's</p> <p>23 referring to?</p> <p>24 A I don't remember.</p> <p>25 Q Okay. Would that be the antioxidant package</p>

<p style="text-align: right;">Page 82</p> <p>1 that it's referring to?</p> <p>2 A Most likely.</p> <p>3 Q Okay. And then the last negative point about</p> <p>4 the current product is it said "High product</p> <p>5 variability."</p> <p>6 That was an issue at the time when this</p> <p>7 report was put together, right?</p> <p>8 A Or it may have been a perception of the product.</p> <p>9 Q Do you disagree with this presentation when it's</p> <p>10 talking about high product variability?</p> <p>11 A Well, that's a relative term.</p> <p>12 Q Okay. But variability in PEX product has</p> <p>13 negative implications for the certification of</p> <p>14 the product, right?</p> <p>15 A Not necessarily.</p> <p>16 Q Okay. Is variability a good thing for the PEXc</p> <p>17 product?</p> <p>18 A It depends in -- it's always in relationship.</p> <p>19 Q Okay. Was there ever concerns about the</p> <p>20 variability of the product that was brought to</p> <p>21 your attention?</p> <p>22 A I don't recall anything specifically, right,</p> <p>23 that I can remember.</p> <p>24 Q Okay. Let's turn to another page within this</p> <p>25 presentation, which is Bates number 133968.</p>	<p style="text-align: right;">Page 84</p> <p>1 Meadow 80 document?</p> <p>2 A At different points and different times, I think</p> <p>3 as we continued to learn, I think we learned</p> <p>4 more about the processes and stuff like that</p> <p>5 that, you know, some of the theories just</p> <p>6 weren't correct.</p> <p>7 Q Okay. And was there a written record made of</p> <p>8 that? In other words, when somebody said, you</p> <p>9 know, we disagree with Jana's findings, we think</p> <p>10 they're wrong and here's why?</p> <p>11 A I'm not sure about that.</p> <p>12 Q Now, at one point was it considered by NIBCO to</p> <p>13 actually buy its own E-beam equipment?</p> <p>14 A I'm sorry?</p> <p>15 Q At one point was it ever considered by NIBCO to</p> <p>16 buy its own E-beam facility and do it in-house?</p> <p>17 A Sure.</p> <p>18 Q Okay. And that wasn't done because why?</p> <p>19 A Primarily because of the payback, the high cost</p> <p>20 of capital.</p> <p>21 Q Did you ever get involved with the issue of what</p> <p>22 the level of E-beam intensity should be? For</p> <p>23 instance, in the amount of Mrads that were used</p> <p>24 to process the PEXc product?</p> <p>25 A Which PEXc product?</p>
<p style="text-align: right;">Page 83</p> <p>1 It's talking about current process. It appears</p> <p>2 to be -- it's negatives. You agree that that's</p> <p>3 what it's at least presenting here, right?</p> <p>4 A Uh-huh.</p> <p>5 Q And it's -- bullet point it makes is "E-beam</p> <p>6 process high source of variability," and then it</p> <p>7 also says "Proper QC control not in place."</p> <p>8 Were those concerns that you were aware of,</p> <p>9 of NIBCO PEXc process for the 1006 product?</p> <p>10 A Okay. I'm sorry. You're going to have to ask</p> <p>11 me the question one more time.</p> <p>12 Q I'm sorry. Let me try that again.</p> <p>13 So on this page that we're looking at,</p> <p>14 "Current Process," it has negatives as to</p> <p>15 what -- at this point in time, in the 2009 time</p> <p>16 frame, it says, "E-beam process high source of</p> <p>17 variability" and "Proper QC control not in</p> <p>18 place."</p> <p>19 Were those issues that you were aware of</p> <p>20 during this time frame in 2009?</p> <p>21 A I believe that these were some postulates or</p> <p>22 theories that Jana was theorizing.</p> <p>23 Q Did people at -- including yourself -- at NIBCO</p> <p>24 disagree and object with Jana as to their</p> <p>25 observations or conclusions as reflected in this</p>	<p style="text-align: right;">Page 85</p> <p>1 Q Let's say the 1006 product?</p> <p>2 A I don't recall specifically other than I think</p> <p>3 we -- I can't remember the details of it all at</p> <p>4 this point.</p> <p>5 Q Okay. Well, why don't we turn to, within this</p> <p>6 Meadow 80, 134027, which at the top of the page</p> <p>7 reads "NIBCO PEXc" --</p> <p>8 MR. BRADSHAW: Give me that number one more</p> <p>9 time, I'm sorry.</p> <p>10 MR. DEUTSCH: I'm sorry. 134027.</p> <p>11 BY MR. DEUTSCH:</p> <p>12 Q It's entitled "NIBCO PEXc formulations." And if</p> <p>13 you look on that, there's a section called</p> <p>14 "Summary," and within "Summary" there's a bullet</p> <p>15 point, "E-beam process history," and below that</p> <p>16 it says, "From 2001 dosage has been increased</p> <p>17 from 18 Mrads to between 24 and 28 Mrads."</p> <p>18 Does that refresh your memory at all as to</p> <p>19 issues about what the level of E-beam intensity</p> <p>20 should be for the PEXc products?</p> <p>21 A No. I mean, we developed what it should be for</p> <p>22 the PEX 300 -- the new reformulation product. I</p> <p>23 don't recall anything relative to the PEX 1006.</p> <p>24 Q How is it set for the new 3008 product?</p> <p>25 A To the best of my memory, we did trials in</p>

<p style="text-align: right;">Page 86</p> <p>1 comparison to the PEX standard gel levels and</p> <p>2 then relative to all the product certification</p> <p>3 requirements.</p> <p>4 Q Okay. Do you know what level of E-beam that</p> <p>5 wound up calling for?</p> <p>6 A Well, what do you mean, what level of --</p> <p>7 Q I'm sorry. I'm just trying to understand the</p> <p>8 level of E-beam, I guess, the Mrads that were</p> <p>9 used for the 3308 product.</p> <p>10 A You mean the amount of irradiation that it</p> <p>11 receives?</p> <p>12 Q Yes.</p> <p>13 A Yes, we developed what that should be for the</p> <p>14 new product, right, in relationship to the</p> <p>15 product standards. And like I said, the product</p> <p>16 standards and the performance, right.</p> <p>17 Q Do you know what level it was set at, Mrad</p> <p>18 level?</p> <p>19 A Not off the top of my head, no.</p> <p>20 Q Do you know if it was changed over time for the</p> <p>21 3308?</p> <p>22 A I don't remember off the top of my head.</p> <p>23 Q Do you know if it was changed for the 1006</p> <p>24 product?</p> <p>25 A Not off the top of my head.</p>	<p style="text-align: right;">Page 88</p> <p>1 remember anything specific.</p> <p>2 Q Okay. Do you know if NIBCO was marketed as a</p> <p>3 product that had more flexibility than its</p> <p>4 competitors?</p> <p>5 A I don't believe so.</p> <p>6 Q Okay. Again, within Meadow 80, I just wanted</p> <p>7 you to take a look at page 134103, which is</p> <p>8 entitled at the top of this chart "Pipes</p> <p>9 flexibility test, PIB."</p> <p>10 Have you ever seen this chart before?</p> <p>11 A I don't recall off the top of my head, no.</p> <p>12 Q Or other charts comparing the flexibility of</p> <p>13 NIBCO's PEX products?</p> <p>14 A Well, like I said before, I remember</p> <p>15 conversations and discussion; I don't remember</p> <p>16 specifics of them.</p> <p>17 Q Now, when you look at this chart and it has the</p> <p>18 products besides DuraPEX, do those encompass the</p> <p>19 competitors of NIBCO's PEXc products?</p> <p>20 A I'm not sure who all these products are and what</p> <p>21 they're marketed for.</p> <p>22 Q Do you have any idea who the competitors for</p> <p>23 NIBCO's PEXc products have been?</p> <p>24 A Well, I believe the market leader is Uponor.</p> <p>25 Q Okay. And who else would be a competitor?</p>
<p style="text-align: right;">Page 87</p> <p>1 Q Now, did you have interaction with Colortech as</p> <p>2 part of your work on the PEXc products?</p> <p>3 A Yes, on the reformulation project, yes.</p> <p>4 Q Who did you interface with there at Colortech?</p> <p>5 A I don't remember the gentleman's name.</p> <p>6 Q Okay. And what were the -- were there certain</p> <p>7 issues you had to cover with Colortech as part</p> <p>8 of the reformulation?</p> <p>9 A Well, we just worked relative to the different</p> <p>10 types of antioxidants that were commercially</p> <p>11 available and what could be compounded into the</p> <p>12 master batch that goes into the reformulation</p> <p>13 product.</p> <p>14 Q Were there changes made to the formulation as</p> <p>15 part of your dealings with Colortech?</p> <p>16 A Changes made? Well, I mean, I'm not sure</p> <p>17 exactly what you mean by that, but yeah, I mean,</p> <p>18 they had some technical expertise, and it was</p> <p>19 being provided, and I'm sure that went into some</p> <p>20 of the thoughts relative to the reformulated</p> <p>21 product.</p> <p>22 Q Now, were you ever involved in evaluations of</p> <p>23 the flexibility of NIBCO's PEXc products versus</p> <p>24 its competitors in the marketplace?</p> <p>25 A I recall some things about that, but I don't</p>	<p style="text-align: right;">Page 89</p> <p>1 A I don't know everybody, but the names that I</p> <p>2 believe typically come up are Zurn is, or was,</p> <p>3 or has, and so is Rehau, right, would've been</p> <p>4 another competitor.</p> <p>5 Q Anybody else?</p> <p>6 A I don't know.</p> <p>7 Q Do you know if any of the competitors' products</p> <p>8 are PEXc products as opposed to A and B?</p> <p>9 A I don't know all -- what everybody's products</p> <p>10 are.</p> <p>11 Q Okay. Do you know if anybody else sells a PEXc</p> <p>12 product besides NIBCO?</p> <p>13 A I believe there are some European manufacturers</p> <p>14 of PEXc, but I don't know everybody else.</p> <p>15 Q Put this aside for a moment.</p> <p>16 I would like you to take a look at what we</p> <p>17 previously marked as Exhibit 30 in the Meadow</p> <p>18 case. And this is a confidential PEX pipe</p> <p>19 development strategy with Jana Laboratories. It</p> <p>20 says revision date, January 28, 2009. It was</p> <p>21 created by Dave Bobo, which is obviously</p> <p>22 yourself, and I just want to confirm you wrote</p> <p>23 this, right?</p> <p>24 A I believe so, yes.</p> <p>25 Q Okay. And when it says revision date. Was</p>

<p style="text-align: right;">Page 90</p> <p>1 there an earlier version of this?</p> <p>2 A If there was, it would have been just keeping</p> <p>3 track of our own internal drafts.</p> <p>4 Q Okay. So this one was the one that was issued,</p> <p>5 right?</p> <p>6 A I believe so.</p> <p>7 Q Okay. And who did you send this to?</p> <p>8 A I don't remember who all I sent it to.</p> <p>9 Q Okay. I assume everybody on the reformulation</p> <p>10 team at least would've gotten this?</p> <p>11 A I don't remember who all.</p> <p>12 Q Okay. And I assume this is the document you</p> <p>13 reviewed while you were preparing for your</p> <p>14 deposition today?</p> <p>15 A Yes.</p> <p>16 Q Okay. And did you ever -- is there anything in</p> <p>17 here that you would say is inaccurate of what</p> <p>18 you wrote here?</p> <p>19 A Well, I'm not sure, right, what you mean by</p> <p>20 that, right.</p> <p>21 Q Okay. In other words, I mean, you wrote this in</p> <p>22 January 2009, or you issued it in January 2009,</p> <p>23 and this was the knowledge you had at that point</p> <p>24 in time, right?</p> <p>25 A At that point in time, yes.</p>	<p style="text-align: right;">Page 92</p> <p>1 A Okay. Yeah, I remember the document.</p> <p>2 Q You remember that?</p> <p>3 A Uh-huh.</p> <p>4 Q I see the title on the front page is "PEX</p> <p>5 Development Strategy Executive Review,</p> <p>6 February 9th, 2009."</p> <p>7 Who wrote this or who prepared this?</p> <p>8 A I believe that it was prepared for or prepared</p> <p>9 by myself and Randy Doering.</p> <p>10 Q And who was this presented to?</p> <p>11 A I don't remember everybody that it was presented</p> <p>12 to.</p> <p>13 Q Okay. Was it presented at a meeting in a</p> <p>14 conference room and these were the slides shown</p> <p>15 to people?</p> <p>16 A I believe so.</p> <p>17 Q Okay. Do you remember anybody who was in the</p> <p>18 audience?</p> <p>19 A Some, but I don't remember everybody.</p> <p>20 Q Okay. Well, just who do you remember?</p> <p>21 A Randy Doering, Gary Wilson, Steve Malm,</p> <p>22 David Goodling, Rex Martin, Chris Wynn. I don't</p> <p>23 remember anybody else.</p> <p>24 Q Okay. So like you say, this is an exec --</p> <p>25 you're presenting this to the executives of</p>
<p style="text-align: right;">Page 91</p> <p>1 Q Okay. And --</p> <p>2 A Or it was my perception.</p> <p>3 Q And you base this upon, you know, information</p> <p>4 you collected within NIBCO, right?</p> <p>5 A No, not just NIBCO. It was also information or</p> <p>6 perceptions, conversations with Jana as well.</p> <p>7 Q Okay. Now, did you subsequently write any</p> <p>8 updates to this development strategy that you</p> <p>9 wrote?</p> <p>10 A No, not that I'm aware of.</p> <p>11 Q Okay. So this served as kind of a baseline for</p> <p>12 NIBCO moving forward with its PEX development</p> <p>13 programs, right?</p> <p>14 A I believe so.</p> <p>15 (Exhibit No. 81 was marked for</p> <p>16 identification.)</p> <p>17 BY MR. DEUTSCH:</p> <p>18 Q Okay. I would like you to take a look at what</p> <p>19 we've marked as Meadow Exhibit 81, which</p> <p>20 encompasses NIBCO Meadow Bates numbers 15405</p> <p>21 through 15423, and take a look at this document,</p> <p>22 tell me if you recognize it, and if so, what it</p> <p>23 is. By the way, it's dated February 9, 2009.</p> <p>24 A This document?</p> <p>25 Q Yes.</p>	<p style="text-align: right;">Page 93</p> <p>1 NIBCO, right?</p> <p>2 A Some of them are a partial group, at least,</p> <p>3 right. Like I said, I don't remember everybody.</p> <p>4 Q Sure. And obviously it's an important</p> <p>5 presentation because you got all the senior</p> <p>6 people -- or many of the senior people in the</p> <p>7 audience, right?</p> <p>8 A Sure.</p> <p>9 Q Okay. Now, on the third page of this, 154307,</p> <p>10 you have PEX problem statement that you</p> <p>11 presented to the group, and it says, "NIBCO is</p> <p>12 at significant risk of losing the current</p> <p>13 third-party certification (product listing.)"</p> <p>14 Now, what is that referring to in this</p> <p>15 presentation?</p> <p>16 A Well, I believe that was, you know, like I said,</p> <p>17 some of the theories that Jana was -- because of</p> <p>18 the policies and some of the actions that NSF</p> <p>19 were undertaking as well as how the standard was</p> <p>20 written, right, that there were problems in the</p> <p>21 standard that needed to be addressed.</p> <p>22 Q Okay. Were any of those attributable to</p> <p>23 concerns about gel testing of NIBCO's PEX</p> <p>24 products that fell below the 50-year projected</p> <p>25 life of the product?</p>

<p style="text-align: right;">Page 94</p> <p>1 A Gel testing is not related to that, so I don't 2 understand. 3 Q Okay. The concerns about losing certification, 4 were those at all related to tests that 5 indicated the product would not last 50 years? 6 A Not that I remember. 7 Q Okay. Was the concern at all related to any OIT 8 testing that had been done of NIBCO's PEXc 9 product? 10 A Not that I recall or remember. 11 Q Okay. Was there any discussion at the 12 presentation based upon this statement made 13 under the PEX problem statement either, you 14 know, you discussing it or the audience making 15 comments or making responses to it? 16 A I'm not sure I'm following your question. 17 Q Okay. I'm just trying to picture this. So I 18 assume you and/or Randy Doering are presenting 19 this to the group and you have these slides. 20 So I'm just trying to understand. Was 21 there a discussion about this first bullet point 22 that you presented, that NIBCO is at significant 23 risk of losing the current third-party 24 certification? 25 A Was there any discussion?</p>	<p style="text-align: right;">Page 96</p> <p>1 A I don't know why. 2 Q Who determined to hold this meeting and have you 3 and Mr. Doering present this set of slides? 4 A Well, actually, I didn't present. 5 Q Okay. 6 A I remember Randy presenting. 7 Q Okay. But you helped him develop the program? 8 A Yes. 9 Q Okay. And do you know who initiated the idea of 10 having the meeting and making this presentation? 11 A I believe it was Gary Wilson. I believe so, 12 right. 13 Q Okay. Did he -- do you recall, was there some 14 conversation with Gary Wilson where he said we 15 need to put a presentation to the executive 16 committee about the status of the PEX products? 17 A Well, I think the purpose of the meeting was to 18 gain consensus on the path forward. 19 Q Okay. But I'm just trying to understand who 20 said let's have the meeting and invite the 21 senior executives? 22 A Like I said, I don't believe -- I believe it was 23 Gary Wilson, but I don't recall specifically. 24 Q Okay. And he was -- was he your direct report? 25 I mean, you reported to him at that time?</p>
<p style="text-align: right;">Page 95</p> <p>1 Q At that meeting, yes. 2 A I don't recall any specific conversations. 3 Q Okay. Anybody take notes or memorialize what 4 happened at that meeting? 5 A I'm not sure I understand what you mean by 6 "memorialize." 7 Q Somebody might summarize, here's what was said 8 at the meeting, or here was the conclusion of 9 the meeting and maybe circulate it around. It 10 could be an email, it could be a memo. 11 A Not that I remember. 12 Q Now, the second bullet point you had under your 13 PEX problem statement is, "Issue is due to the 14 variation of current product's performance when 15 compared to current chlorine resistant standard 16 and code requirements." 17 Now, that was based on what? 18 A Like I said, I believe that was based upon, you 19 know, Jana's theories at the time. 20 Q Okay. Anybody from Jana at this executive 21 meeting that occurred February 9th, 2009? 22 A Not that I recall. 23 Q Okay. Any reason why they didn't participate 24 even though you're saying they had significant 25 input into the issues presented at this meeting?</p>	<p style="text-align: right;">Page 97</p> <p>1 A No. 2 Q Okay. 3 A I reported to Rick Noel and Rick Noel reported 4 to Gary Wilson. 5 Q Okay. Did you ever get any feedback from 6 Rex Martin as to what was presented at this 7 February 9th, 2009, meeting? 8 A In terms of what? 9 Q It was something he said at the meeting or 10 subsequent to the meeting, him reacting to the 11 issues presented in what's reflected in this 12 Meadow 81? 13 A I don't recall anything specifically. 14 Q Okay. Or even generally, just that he responded 15 to the presentation? 16 A I believe that they wanted to move forward with 17 the reformulation project, right. 18 Q Okay. Any specific reaction you got from 19 Steve Malm? 20 A I don't remember. I mean, the consensus was to 21 move forward with the reformulation project. 22 Q Okay. And that included authorizing the 23 expenditure of funds to do that project, right? 24 A I believe so. 25 Q Okay. And do you know what level of approval</p>

25 (Pages 94 - 97)

<p style="text-align: right;">Page 98</p> <p>1 was required to proceed with the reformulation</p> <p>2 project? Like what's the highest level that was</p> <p>3 needed to check off on it?</p> <p>4 A I don't remember off the top of my head.</p> <p>5 Q Now, on page 15413 of this Meadow Exhibit 81 you</p> <p>6 have a slide that was presented that you worked</p> <p>7 on called "Options Reviewed," and you list some</p> <p>8 options.</p> <p>9 Do you recall what the discussion was after</p> <p>10 you presented this slide?</p> <p>11 A No.</p> <p>12 Q Okay. And what did -- among these options, what</p> <p>13 did NIBCO choose to do?</p> <p>14 A Well, we moved forward with the reformulation</p> <p>15 project.</p> <p>16 Q That would be really the third bullet point, I</p> <p>17 guess, right?</p> <p>18 A No, not necessarily, because it has two aspects</p> <p>19 of that, and the reality is we went after the</p> <p>20 proprietary PEXc, and what was proprietary about</p> <p>21 it was not necessarily the resin but the</p> <p>22 additive package in combination with the resin.</p> <p>23 Q Now, if you turn to 15416, you have a slide here</p> <p>24 that you presented that said "Selected path,</p> <p>25 five aspects," and one of the bullet points</p>	<p style="text-align: right;">Page 100</p> <p>1 Jana business?</p> <p>2 A I can't say for sure.</p> <p>3 (Exhibit No. 82 was marked for</p> <p>4 identification.)</p> <p>5 BY MR. DEUTSCH:</p> <p>6 Q Okay. If you could take a look at what we've</p> <p>7 marked as Meadow 82, which is a two-page</p> <p>8 document encompassing NIBCO Meadow 134660</p> <p>9 through 61. It's an email chain that you're at</p> <p>10 the top of the chain.</p> <p>11 Tell me if you recognize this document and</p> <p>12 what it concerns.</p> <p>13 A I don't remember the specifics of it. I mean,</p> <p>14 it looks like an email where we're trying to</p> <p>15 coordinate a meeting time.</p> <p>16 Q Okay. And that's with Aleesha Valentine?</p> <p>17 A Uh-huh.</p> <p>18 Q And she's a Jana person?</p> <p>19 A I believe so, yeah.</p> <p>20 Q Okay. And you worked with her from when to when</p> <p>21 on project for NIBCO?</p> <p>22 A It would have just been part of the</p> <p>23 reformulation project.</p> <p>24 Q Okay. So over the few years, like 2009 to 2011</p> <p>25 or '12?</p>
<p style="text-align: right;">Page 99</p> <p>1 says, "Maintain third-party listing during</p> <p>2 development." Below it, it says, "Seek</p> <p>3 additional third-party certification (IAPMO),"</p> <p>4 and then "Defensive plan with NSF."</p> <p>5 Now, why did you present this at this point</p> <p>6 in time, February of 2009?</p> <p>7 A Well, I believe that it was put together just to</p> <p>8 show the different aspects of the project moving</p> <p>9 forward.</p> <p>10 Q But these specific points were because there was</p> <p>11 concern about losing NSF certification, right?</p> <p>12 A Well, I think it was -- it was -- you know, like</p> <p>13 I said, Jana was promoting -- NSF was -- I'm</p> <p>14 trying to think of what's the right words to</p> <p>15 use.</p> <p>16 They weren't a fan of NSF because of how</p> <p>17 NSF was changing and didn't think that they were</p> <p>18 doing the right things, right, relative, so --</p> <p>19 Q Okay. Am I correct in understanding Jana's part</p> <p>20 of NSF now?</p> <p>21 A No, I don't believe that to be the case.</p> <p>22 Q Okay. Jana is part of what organization now?</p> <p>23 A Jana -- I think Jana is Jana, and I think that</p> <p>24 they sold the testing facilities to NSF.</p> <p>25 Q I see. Okay. So there's still a freestanding</p>	<p style="text-align: right;">Page 101</p> <p>1 A I don't know -- remember the specific dates, but</p> <p>2 in general.</p> <p>3 Q But she stayed with the project while it was</p> <p>4 being developed, right?</p> <p>5 A I believe so.</p> <p>6 Q Okay. Among the Jana people, who did you work</p> <p>7 primarily with on the NIBCO PEX projects?</p> <p>8 A Well, like I said before, it was -- Wayne Bryce</p> <p>9 was involved, Patrick Vibien, Dr. Oliphant, I</p> <p>10 think, Dr. Ken Oliphant -- I don't remember his</p> <p>11 first name. It's been too long.</p> <p>12 Aleesha Valentine was involved. There are</p> <p>13 some other people. Scott Tordoff I think is his</p> <p>14 name, and then maybe Sarah Chung, right, for</p> <p>15 different aspects, different times.</p> <p>16 There were different people coming and</p> <p>17 going, right, so I don't remember everybody.</p> <p>18 Q Okay. Was Aleesha Valentine kind of the point</p> <p>19 person for coordination with NIBCO on the PEX</p> <p>20 projects?</p> <p>21 A No.</p> <p>22 Q Was there a person who was the point person on</p> <p>23 Jana's side?</p> <p>24 A Well, it started with Wayne Bryce, and then it</p> <p>25 was moved to Patrick Vibien. And then there</p>

<p style="text-align: right;">Page 102</p> <p>1 were some different people handling different</p> <p>2 aspects of it, if you will.</p> <p>3 Q Okay. Now, on the second page of this Meadow 82</p> <p>4 there's an email from Aleesha Valentine to you</p> <p>5 where she's obviously coordinating a -- sort of</p> <p>6 a conference call with NIBCO people, right?</p> <p>7 A I believe so.</p> <p>8 Q Okay. And what do you remember as the content</p> <p>9 and purpose of that call?</p> <p>10 A I don't really remember.</p> <p>11 Q Okay. Do you remember at all the content of who</p> <p>12 said what on that call?</p> <p>13 A No.</p> <p>14 Q All right. If you can take a look at what's</p> <p>15 been previously marked as 40 in this case. If</p> <p>16 you can look at what's been previously marked as</p> <p>17 Exhibit 40, which is a March 30, 2009, Jana</p> <p>18 Laboratories document produced by NIBCO in this</p> <p>19 case with the title at the top "NIBCO</p> <p>20 Certifications" and tell me if you recognize</p> <p>21 this document, if you've seen it before?</p> <p>22 A I don't remember this specific document. I'm</p> <p>23 not going to say that I haven't seen it in the</p> <p>24 past.</p> <p>25 Q Right. And indeed, if you look at Meadow 82</p>	<p style="text-align: right;">Page 104</p> <p>1 disagreement with the history that have they've</p> <p>2 listed here?</p> <p>3 A Oh, I don't know, right, for sure on that. I</p> <p>4 mean, I don't know if what they're putting here</p> <p>5 is correct or not.</p> <p>6 Q Okay. Do you know if anybody at NIBCO responded</p> <p>7 to this report and said, no, I think you and</p> <p>8 Jana have it wrong?</p> <p>9 A I don't know.</p> <p>10 Q Okay. Now, in the second page of this it has a</p> <p>11 section called "Path Forward," which obviously</p> <p>12 has to do with NIBCO's certifications, and it</p> <p>13 has an Option 1 under "Path Forward," and it</p> <p>14 says, "With the failure of the red pipe to meet</p> <p>15 the minimum lifetime requirement and the</p> <p>16 potential of an NSF sample being collected at</p> <p>17 any point, it is not safe to only maintain a</p> <p>18 single source for certification of this product.</p> <p>19 To this end, NIBCO must reestablish</p> <p>20 certification of the PEXc product line at IAPMO.</p> <p>21 The certification was withdrawn at the end of</p> <p>22 2008, PER NIBCO's request, so reinstatement may</p> <p>23 merely be a paperwork process."</p> <p>24 Now, when you read that, particularly with</p> <p>25 the concern that NSF might withdraw their</p>
<p style="text-align: right;">Page 103</p> <p>1 where it refers to Aleesha Valentine sending to</p> <p>2 you and to Mark Clark and Earl Sexton a document</p> <p>3 on that day and it's concerning certification,</p> <p>4 one would imagine it's this, Exhibit 40, right?</p> <p>5 A I don't remember specifically.</p> <p>6 Q Okay. Do you know who -- well, it looks like</p> <p>7 the people copied on the email must have</p> <p>8 received this document, right? By "the email,"</p> <p>9 I mean the first email on Meadow 82, right?</p> <p>10 A I'm not certain.</p> <p>11 Q By that, I'm referring to the bottom email. It</p> <p>12 seems to be a transmittal of this document and</p> <p>13 then setting up a conference call with you and</p> <p>14 other key people in NIBCO.</p> <p>15 A Was that a question?</p> <p>16 Q Yes. I have a question tone at the end.</p> <p>17 I'm just trying to confirm, this -- what</p> <p>18 appears to me that what's getting transmitted in</p> <p>19 Meadow 82 must be this attachment that's also</p> <p>20 dated March 30, 2009?</p> <p>21 A I'm not certain.</p> <p>22 Q Okay. Is there any aspect of this document that</p> <p>23 was sent by Jana to NIBCO that you disagree</p> <p>24 with? For instance, it lists the history.</p> <p>25 I mean, is there any -- do you have any</p>	<p style="text-align: right;">Page 105</p> <p>1 certification, was there ever consideration of</p> <p>2 disclosure of that concern to IAPMO by NIBCO?</p> <p>3 A Well, I'm not sure -- knowing what I know now,</p> <p>4 I'm not sure that I would agree with that</p> <p>5 statement in the first place.</p> <p>6 Q What's written here as the "Path Forward"?</p> <p>7 A Yeah.</p> <p>8 Q Okay. In what sense?</p> <p>9 A Well, I'm not sure that -- the failure of red</p> <p>10 pipe, I'm not sure it should be classified as a</p> <p>11 failure.</p> <p>12 Q Okay. And why do you say that?</p> <p>13 A Well, because, you know -- well, the data and</p> <p>14 the test results are upheld by NSF.</p> <p>15 Q I'm sorry, are what?</p> <p>16 A The data and the test results on what the</p> <p>17 product is, is held, reviewed, and authorized by</p> <p>18 NSF.</p> <p>19 Q Okay.</p> <p>20 A It's not our -- it's not really our data, right.</p> <p>21 That's the way I understand it.</p> <p>22 Q Okay.</p> <p>23 A Right. I guess that's my understanding now.</p> <p>24 It's really -- it's NSF that does the testing,</p> <p>25 it's NSF that does -- that reviews the data and</p>

Page 106

1 then just says whether or not the product is
 2 compliant.
 3 Q So am I correct in understanding, the system
 4 would be NSF will take some of the pipe and do
 5 its own testing of NIBCO's pipe; is that right?
 6 A They do it.
 7 Q They do it?
 8 A Absolutely.
 9 Q Okay. And do they -- but do they then share
 10 what their findings were with NIBCO?
 11 A Well, they typically -- in general terms,
 12 right -- and we're talking broader here than
 13 that -- is that basically once a product is --
 14 when we -- when a product is being applied for a
 15 certification, the agency tests the product and
 16 then basically says it's authorized or it's
 17 deemed compliant and then, therefore, you can
 18 apply these marks or these certification marks
 19 to the product.
 20 Q Now, do you have some basis to doubt the
 21 efficacy or the quality of NSF's testing of
 22 NIBCO's PEXc pipe?
 23 A I'm not sure I understand exactly what you're
 24 saying there, right.
 25 Q Okay. I thought you were suggesting in your

Page 107

1 answer about this Option 1, raising the question
 2 about NSF revoking its certification, that -- I
 3 thought you were making a point that maybe you
 4 questioned the quality of their testing?
 5 A No, I'm not questioning that.
 6 Q Okay.
 7 A I just -- the characterization that the red
 8 failed, I would not characterize it that way.
 9 Q And what do you base that on? Why?
 10 A Well, because the -- I mean, NSF has the data.
 11 If they deem that it failed, they wouldn't have
 12 issued the certification.
 13 Q Okay. Now, you see in this Jana document that
 14 was submitted to NIBCO, they provide seven
 15 options.
 16 Now, was there any discussion within NIBCO
 17 about how to implement those options?
 18 A I don't recall. I'm not sure exactly what
 19 you're asking about there.
 20 Q Well, it seems like Jana --
 21 A I'm not sure that all of these options were -- I
 22 think they were just options.
 23 Q Okay. Well, to your understanding, were there
 24 certain options that NIBCO adopted, based upon
 25 these options presented by Jana, who is working

Page 108

1 with NIBCO on how to maintain its certifications
 2 at this point in time?
 3 A Well, I believe that, you know, we did go and
 4 reestablish the certification with IAPMO. And I
 5 believe -- let's see. The Option 6 is really --
 6 I believe that is getting into the changes to
 7 the standard.
 8 Q Okay. So you're saying that's one that NIBCO
 9 and Jana were pursuing among these seven
 10 options?
 11 A I remember that. I can't say I remember
 12 everything else.
 13 Q Okay. Were there any of the options that were
 14 rejected out of hand and communicated to Jana
 15 that NIBCO wasn't going to do those options?
 16 A Well, this thing here, Option 7, I don't believe
 17 that it was ever really feasible, right, because
 18 of -- I mean, we manufacture red tubing all the
 19 time. To the best of my -- at least that's my
 20 understanding.
 21 Now, was there -- you asked the question
 22 was it ever rejected and communicated back.
 23 Q Correct.
 24 A Communicated back, not that I have a record of,
 25 right, but I just remember thinking that, okay,

Page 109

1 we're not going to be able to do that.
 2 Q And the purpose of that Option 7 was really --
 3 proposed by Jana -- was a concern that NSF would
 4 come in, find the red pipe, and test and reject
 5 it, right?
 6 A I think that, yeah, Jana -- like I said, I
 7 believe Jana was theorizing that, you know,
 8 there were just problems at NSF to begin with,
 9 right, and I hate to characterize it this way,
 10 but I just don't believe that they trusted NSF.
 11 Q Okay. Did they ever -- did Jana ever express
 12 concern about the pipe that NIBCO had might fail
 13 the NSF test for its durability?
 14 A Well, you'd have to characterize what you mean
 15 by "durability."
 16 Q Well, am I correct in understanding that the
 17 pipe is supposed to be certified for at least 50
 18 years of life, right?
 19 A I don't -- no, I'm not -- I'm not sure I would
 20 agree with that statement.
 21 Q Okay. Is there a durability level that you
 22 would say that pipe would need to demonstrate to
 23 be certified?
 24 A Well, it has to be -- to demonstrate to be in
 25 compliance with the standard.

<p style="text-align: right;">Page 110</p> <p>1 Q And the standard doesn't include a durability 2 requirement that it should project out to a 3 50-year life of the pipe? 4 A I don't believe I would characterize it that 5 way. 6 Q Do you have an understanding what the standards 7 for certification of NIBCO's pipe was? 8 A I'm sorry? 9 Q In other words, what were the criteria that 10 NIBCO's pipe had to meet to satisfy 11 certification standards? 12 A Well, it's part of -- I mean, the standards are 13 associated with ANSI/NSF 14, ASTM F876, and I 14 believe ASTM F2023. 15 It's been awhile since I've looked at 16 those, right, but that's what I remember off the 17 top of my head. 18 Q Were you ever aware of the idea that the pipe 19 should last 50 years, as reflected in the 20 extrapolation of tests of the pipe that would 21 demonstrate it could last that long? 22 A I'm not sure -- yeah, I'm not sure of any test 23 that says that -- of that, from that standpoint. 24 Q Now, the last page of this Exhibit 40 that we've 25 been looking at, there's a section "How to Deal</p>	<p style="text-align: right;">Page 112</p> <p>1 term "ducking" and asking him to make 2 assumptions of what's in their mind. 3 But you can answer the question. 4 THE WITNESS: And you're going to have to 5 say it one more time because I lost my train of 6 thought. 7 BY MR. DEUTSCH: 8 Q Okay. I think one can read this on the last 9 page of 40 as a strategy proposed by Jana to 10 NIBCO to try to avoid dealing with NSF and 11 perhaps even ducking their inquiries. 12 So does that not strike you as odd for the 13 relationship between the plumbing manufacturer 14 and the certifying body? 15 MR. BRADSHAW: Once again, just before you 16 answer, I object to calling for speculation and 17 argumentative and using the word "ducking." 18 But you can answer. 19 THE WITNESS: Well, it didn't strike me as 20 odd because, like I said, I believe that Jana 21 had a general distrust of NSF. 22 BY MR. DEUTSCH: 23 Q Okay. And did you or people at NIBCO have any 24 discomfort about not disclosing these efforts to 25 deflect NSF while NIBCO was seeking its</p>
<p style="text-align: right;">Page 111</p> <p>1 with NSF," and it says, "Do not voluntarily 2 bring up the DOT issue to NSF. Don't remind 3 them that the red pipe was granted a provisional 4 listing based on policy that no longer exists. 5 Avoid it like the plague." 6 Was that approach implemented by NIBCO? 7 A I don't remember anything. I mean -- and 8 typically, right, from that standpoint, we rely 9 upon the agencies to -- they come in and pull 10 the product whenever they deem it's necessary to 11 pull it. 12 Q Do you have an understanding why she's -- why 13 whoever wrote this for Jana is trying to help 14 and warn NIBCO from -- in its dealings with NSF? 15 A I really -- can you ask that question one more 16 time because I'm not sure I caught it the right 17 way? 18 Q Well, obviously, you're getting some 19 instructions and warnings from NSF, which -- I'm 20 sorry -- from Jana as to dealings with NSF 21 which, on their face, seem a little odd, that 22 NIBCO dealing with its certification agency is 23 essentially trying to -- one could characterize 24 these as ducking the certifier, NSF, right? 25 MR. BRADSHAW: I'm going to object to the</p>	<p style="text-align: right;">Page 113</p> <p>1 recertification with IAPMO? 2 MR. BRADSHAW: Object to the word "deflect" 3 as argumentative. 4 But you may answer. 5 THE WITNESS: Yeah, I'm not sure I follow 6 what your question was. I'm sorry. 7 BY MR. DEUTSCH: 8 Q Okay. It seems like what's going on here is, 9 you know, NIBCO has an NSF certification at this 10 time, right, but there's concerns about NSF 11 continuing the certification of NIBCO's PEX 12 product so, therefore, this strategy appears to 13 be, go to IAPMO and get that certification 14 reissued, right? 15 MR. BRADSHAW: Object to speculation. 16 You can answer. 17 THE WITNESS: Well, I believe that, you 18 know, they -- like I said, I believe that Jana 19 had a general distrust of NSF and basically was 20 promoting the IAPMO solution as a result of 21 that. 22 BY MR. DEUTSCH: 23 Q Okay. So that basically became the strategy of 24 NIBCO at this point in time, seek the IAPMO 25 recertification, right?</p>

<p style="text-align: right;">Page 114</p> <p>1 A Well, we did, and we did get the recertification</p> <p>2 and then, you know, subsequently our product was</p> <p>3 tested and recertified by NSF as well.</p> <p>4 Q But at this time was there any consideration of</p> <p>5 disclosing to the IAPMO why NIBCO was returning</p> <p>6 to IAPMO as its certifier?</p> <p>7 A Any concern in disclosing it? I don't -- I</p> <p>8 don't believe there was any conversation.</p> <p>9 Q In other words, disclosing this concern about</p> <p>10 NSF as the basis for why, suddenly, NIBCO needed</p> <p>11 to go back to IAPMO as its certification agency?</p> <p>12 A No, I don't believe so.</p> <p>13 Q Okay. And that was never disclosed to IAPMO,</p> <p>14 right?</p> <p>15 A I don't believe that there was ever any</p> <p>16 conversation about it because it's pretty</p> <p>17 natural to have the agencies compete amongst</p> <p>18 themselves for the certifications.</p> <p>19 Q Is there any duty under the, I don't know, the</p> <p>20 rules of the industry that if you're having some</p> <p>21 problem that may cause you to lose</p> <p>22 certification, that you need to share that and</p> <p>23 disclose it to the certifying agencies?</p> <p>24 MR. BRADSHAW: Object to the term "rules of</p> <p>25 the agency" as being -- "rules of the industry"</p>	<p style="text-align: right;">Page 116</p> <p>1 MR. ANDERSON: Let's take a break.</p> <p>2 (A recess was taken from 11:14 a.m. to</p> <p>3 12:09 p.m.)</p> <p>4 MR. DEUTSCH: Back on the record.</p> <p>5 BY MR. DEUTSCH:</p> <p>6 Q Now, am I correct in understanding that NIBCO's</p> <p>7 PEXc products include fittings and clamps; is</p> <p>8 that right?</p> <p>9 A No.</p> <p>10 Q No, that's not part of the products that it</p> <p>11 sells to the public?</p> <p>12 A Well, the fittings and the clamps are not PEXc.</p> <p>13 Q Okay. But if somebody is using NIBCO's PEXc</p> <p>14 tubing, would they also use fittings and clamps</p> <p>15 as part of the installation?</p> <p>16 A I believe so. They can. The tubing is -- can</p> <p>17 be utilized with different fittings and clamping</p> <p>18 systems.</p> <p>19 Q Right. And if you use just NIBCO products in</p> <p>20 your total plumbing installation, you get a</p> <p>21 25-year warranty on the product, right?</p> <p>22 A I believe the warranty period is 25 years.</p> <p>23 Q Okay. And if you use somebody else's parts, mix</p> <p>24 them, it's reduced to 10 years, right?</p> <p>25 A I believe the 10-year warranty period is for</p>
<p style="text-align: right;">Page 115</p> <p>1 as being vague and nonexistent, but vague.</p> <p>2 But you can answer.</p> <p>3 THE WITNESS: I'm not aware of any rules or</p> <p>4 anything associated with that.</p> <p>5 BY MR. DEUTSCH:</p> <p>6 Q Okay. How about NIBCO's internal ethical rules?</p> <p>7 Is there any requirement that NIBCO should make</p> <p>8 disclosure to IAPMO about its concerns with</p> <p>9 NSF's certification of its product?</p> <p>10 A I'm not sure that we had a certain concern</p> <p>11 about -- NIBCO had a concern about NIBCO's -- or</p> <p>12 the certification, NSF's certification. I think</p> <p>13 that was -- like I said, that was more of a</p> <p>14 theory that Jana was promoting.</p> <p>15 Q But indeed NIBCO did pursue IAPMO as its</p> <p>16 certifying body in light of the concerns raised</p> <p>17 by Jana, right?</p> <p>18 A We did go and reestablish the certification with</p> <p>19 IAPMO.</p> <p>20 MR. ANDERSON: Do you want to take a break</p> <p>21 for lunch?</p> <p>22 MR. DEUTSCH: It's up to you. It's up to</p> <p>23 the witness. What is your preference?</p> <p>24 THE WITNESS: It doesn't matter to me.</p> <p>25 Whatever you guys want to do.</p>	<p style="text-align: right;">Page 117</p> <p>1 mixed systems.</p> <p>2 Q Okay.</p> <p>3 A That's my understanding.</p> <p>4 Q So NIBCO, if I understand right, acquires clamps</p> <p>5 and fittings from other producers and then sells</p> <p>6 them as part of NIBCO's product line, right?</p> <p>7 A NIBCO manufactures some fittings and also</p> <p>8 sources some fittings and clamps -- or clamping</p> <p>9 systems.</p> <p>10 Q So you're saying they manufacture some of the</p> <p>11 fittings or clamps for its PEXc system?</p> <p>12 A I'm saying that they manufacture some fittings</p> <p>13 that are utilized with PEX systems.</p> <p>14 Q Okay. The fittings and clamps used with NIBCO's</p> <p>15 PEXc systems, is there a certain regimen of</p> <p>16 inspection that's used for the products that are</p> <p>17 acquired by NIBCO and then resold to the public?</p> <p>18 A I'm not certain of what you're asking there,</p> <p>19 right, when you say a regimen of --</p> <p>20 Q I'm just trying to understand.</p> <p>21 My understanding was that NIBCO purchases</p> <p>22 fittings and clamps that are then used in a PEXc</p> <p>23 installation with NIBCO piping; is that correct?</p> <p>24 A Well, there are multiple fittings out on the</p> <p>25 market as well as NIBCO sources some fittings</p>

<p style="text-align: right;">Page 118</p> <p>1 and manufactures some fittings for use within</p> <p>2 PEX systems.</p> <p>3 Q And what are the sources they acquire them from?</p> <p>4 A I don't remember all of the places where.</p> <p>5 Q And is there a quality control system to, you</p> <p>6 know, evaluate the ones that are sourced among</p> <p>7 the fittings and clamps for the PEXc system?</p> <p>8 A I'm not aware of what the details of the -- what</p> <p>9 you're calling the quality control systems are</p> <p>10 for those.</p> <p>11 Q Who at NIBCO would be best able to answer that?</p> <p>12 A I'm not certain.</p> <p>13 Q Okay. Anybody in your organization, you think?</p> <p>14 A I'm not certain. There are different levels of</p> <p>15 inspection and different systems in place, and</p> <p>16 I'm not sure exactly who would be the best,</p> <p>17 right, from that standpoint.</p> <p>18 Q Okay. Now, focusing again on the issues of</p> <p>19 certification of the PEXc 1006 product.</p> <p>20 So at some point NIBCO's strategy was to</p> <p>21 get recertified by IAPMO, right?</p> <p>22 A It was to reestablish the certification with</p> <p>23 IAPMO.</p> <p>24 Q Okay. And could you describe for me the process</p> <p>25 of how that occurred and ultimately allowed</p>	<p style="text-align: right;">Page 120</p> <p>1 of your email system because it says</p> <p>2 "David Bobo" at the top.</p> <p>3 So if you could take a look at this, tell</p> <p>4 me if you recognize this and what it concerns.</p> <p>5 A (Reviewing.)</p> <p>6 Okay.</p> <p>7 Q Okay. So do you recognize this email that you</p> <p>8 received?</p> <p>9 A I don't remember the -- all the specifics about</p> <p>10 it.</p> <p>11 Q Okay. What's your understanding of what this</p> <p>12 concerns, the email you received?</p> <p>13 A Like I said, I don't remember all of the</p> <p>14 specifics about it, but it looks like it's some</p> <p>15 conversation going back and forth between</p> <p>16 Mark Clark and Aleesha relative to what IAPMO</p> <p>17 would be asking for.</p> <p>18 Q Okay. And Aleesha even writes a note for NIBCO</p> <p>19 to send to IAPMO here, right?</p> <p>20 A I believe she's recommending that.</p> <p>21 Q Yes. And was that sent; do you know?</p> <p>22 A I have -- I don't know.</p> <p>23 Q Okay. Now, on the second page of this</p> <p>24 Mark Clark writes an email to Aleesha Valentine</p> <p>25 where he concludes by saying, "To be honest, I'm</p>
<p style="text-align: right;">Page 119</p> <p>1 NIBCO to be recertified by IAPMO?</p> <p>2 A I don't remember all the specifics of it.</p> <p>3 Q Okay. Do you remember any -- sort of the</p> <p>4 evolution of what happened? Who did what?</p> <p>5 A Well, I believe, in general, we requested a</p> <p>6 project with IAPMO, and they did some initial</p> <p>7 testings, per their policy, and then reevaluated</p> <p>8 the tubing and then reestablished the</p> <p>9 certification.</p> <p>10 Q Okay. Are you saying they actually took the</p> <p>11 pipe and retested it as part of their --</p> <p>12 A There would have been some testing, not</p> <p>13 necessarily every single test in the standard,</p> <p>14 but there would be some testing. I remember</p> <p>15 them doing some testing, right.</p> <p>16 (Exhibit No. 83 was marked for</p> <p>17 identification.)</p> <p>18 BY MR. DEUTSCH:</p> <p>19 Q Let's take a look at what we've marked now as</p> <p>20 Meadow 83. Please take a look at what we've</p> <p>21 marked as Meadow 83, which encompasses Bates</p> <p>22 numbers NIBCO Meadow 134140 through 134145.</p> <p>23 It's an email chain. The top is an email</p> <p>24 from Aleesha Valentine to you dated April 21,</p> <p>25 2009. It appears to me this must be printed out</p>	<p style="text-align: right;">Page 121</p> <p>1 not confident that we can get IAPMO to reinstate</p> <p>2 the listing just for the PEX tubing without</p> <p>3 triggering a need for new data."</p> <p>4 Was there a concern at this time that</p> <p>5 providing new data might imperil the</p> <p>6 certification of NIBCO's PEXc product?</p> <p>7 A No, not that I'm aware of.</p> <p>8 Q Take a look at what's been previously marked as</p> <p>9 43 in this case.</p> <p>10 So if you can take a look at what's been</p> <p>11 previously marked as Meadow 43 in this case</p> <p>12 which is, again, an email chain that you're</p> <p>13 copied on, including the top email that was</p> <p>14 dated June 3, 2009. Subject of the email is</p> <p>15 "Reinstatement of NIBCO's PEX listing IAPMO."</p> <p>16 If you can take a look at this and tell me</p> <p>17 if you recognize this document and what it</p> <p>18 concerns.</p> <p>19 A (Reviewing.)</p> <p>20 Okay.</p> <p>21 Q Okay. So do you recognize this document?</p> <p>22 A I don't remember it specifically.</p> <p>23 Q Okay. Does it refresh your memory as to, you</p> <p>24 know, your dealings with Aleesha Valentine in</p> <p>25 terms of getting the IAPMO certification</p>

<p style="text-align: right;">Page 122</p> <p>1 reinstated?</p> <p>2 A I'm sorry, could you ask that one more time?</p> <p>3 MR. DEUTSCH: Could you read that back?</p> <p>4 (The requested text was read by the court</p> <p>5 reporter.)</p> <p>6 THE WITNESS: Somewhat. I mean, you know,</p> <p>7 I don't remember everything about it.</p> <p>8 BY MR. DEUTSCH:</p> <p>9 Q Okay. Now, in this second page, an email you're</p> <p>10 copied on is from Mark Clark -- I'm sorry -- he</p> <p>11 sends it to you and he copies Aleesha Valentine</p> <p>12 May 29th, 2009, and he states -- in his email</p> <p>13 to you he says, "The problem that I believe we</p> <p>14 will have come November is that we do not have</p> <p>15 chlorine resistance test data for all colors</p> <p>16 which is what got us to the point where we are</p> <p>17 at with NSF."</p> <p>18 Do you remember that being a concern at</p> <p>19 this point in time, which is May 2009?</p> <p>20 A No, I don't recall.</p> <p>21 Q And do you know how that concern was ultimately</p> <p>22 resolved?</p> <p>23 A Well, there was chlorine resistance data for all</p> <p>24 of the colors.</p> <p>25 Q Okay. And who had -- or who had done the</p>	<p style="text-align: right;">Page 124</p> <p>1 Laboratories, Inc." on the top page. It's dated</p> <p>2 June 17th, 2009.</p> <p>3 If you can tell me if you recognize this</p> <p>4 document, if you've seen it before?</p> <p>5 A (Reviewing.)</p> <p>6 I can't recall. I mean, I can't recall all</p> <p>7 of the documents off the top of my head.</p> <p>8 Q But does it seem to be something that you had</p> <p>9 received while, you know, engaging Jana with the</p> <p>10 NIBCO PEX projects?</p> <p>11 A Like I said, I can't recall specifically all of</p> <p>12 the documents that were sent to me or back and</p> <p>13 forth at this point in time because it's been</p> <p>14 too many years ago.</p> <p>15 Q Okay. Well, given that Jana issues this report,</p> <p>16 who would you expect, within NIBCO, that would</p> <p>17 have received this?</p> <p>18 A I'm not certain.</p> <p>19 Q Was it routine that the project team that we saw</p> <p>20 in this Exhibit 80 would be the recipients of</p> <p>21 this update from Jana?</p> <p>22 A Not necessarily.</p> <p>23 Q No? Would there be a narrower subgroup that</p> <p>24 received this update from Jana?</p> <p>25 A It would probably most likely -- if it was</p>
<p style="text-align: right;">Page 123</p> <p>1 testing of those?</p> <p>2 A Well, it was listed with NSF.</p> <p>3 Q So it was testing done by NSF?</p> <p>4 A It would've been NSF's tests conducted. I don't</p> <p>5 know where the actual physical test -- product</p> <p>6 was tested, if they had outsourced it or</p> <p>7 whatever, but it was the data that they had on</p> <p>8 file.</p> <p>9 Q Okay. Which was tested from what time period?</p> <p>10 A You'd have to go -- I don't know of a specific</p> <p>11 date or time period.</p> <p>12 Q NIBCO would have a copy of the test results from</p> <p>13 NSF?</p> <p>14 A I'm not certain of having all of the actual test</p> <p>15 reports. So I'm not sure if they had all of the</p> <p>16 test reports at that point in time.</p> <p>17 Q Is it your understanding that NSF wouldn't</p> <p>18 necessarily share their test reports with NIBCO?</p> <p>19 A I'm not certain of how that would've occurred</p> <p>20 because of the transition from CPI to NIBCO</p> <p>21 and -- so I'm not sure how and when test reports</p> <p>22 were transmitted, so on and so forth.</p> <p>23 Q Okay. If you can take a look at what's been</p> <p>24 marked as Meadow 41. This is entitled "Update</p> <p>25 NIBCO Certifications." It has "Jana</p>	<p style="text-align: right;">Page 125</p> <p>1 issued to us, would've been issued to the</p> <p>2 project team members that were working on it at</p> <p>3 this time.</p> <p>4 Q Now, within this update it has the seven options</p> <p>5 that are reflected in the June 30 version that</p> <p>6 was previously sent to NIBCO as reflected in</p> <p>7 Exhibit 40 on March 30th.</p> <p>8 So was there somebody that was tasked in</p> <p>9 NIBCO with tracking the options that Jana had</p> <p>10 proposed or put forth to NIBCO?</p> <p>11 A I don't believe so.</p> <p>12 Q Now, in Option 6 listed on the first page of</p> <p>13 this Meadow 41, this Option 6 concerns the, you</p> <p>14 know, change in standards for ASTM relative to</p> <p>15 NIBCO's PEX products.</p> <p>16 So it says, "A task group meeting will be</p> <p>17 held soon with a ballot to the rest of the</p> <p>18 committee at ASTM following."</p> <p>19 Did you have any idea who's on the ASTM</p> <p>20 committee that's referred to here?</p> <p>21 A No. You would have to get -- I believe that the</p> <p>22 committee members are listed on the standard</p> <p>23 itself.</p> <p>24 Q Are listed?</p> <p>25 A I believe they are, right. The ASTM -- the</p>

<p style="text-align: right;">Page 126</p> <p>1 committee members for that particular standard.</p> <p>2 Q Okay. Now, do you know if NIBCO itself has a</p> <p>3 representative on the standards relevant to its</p> <p>4 PEX products?</p> <p>5 A NIBCO participates in a lot of standards</p> <p>6 organizations. So I don't know what all</p> <p>7 committees that we sit on.</p> <p>8 Q So you're not sure if NIBCO's on the PEX</p> <p>9 committee itself?</p> <p>10 A I'm not sure.</p> <p>11 Q Okay. Now, on this first page of Meadow 41 it</p> <p>12 has Option 7. It says, "NIBCO has a plan</p> <p>13 involving storage of the red pipe."</p> <p>14 Do you know what that plan was?</p> <p>15 A I don't remember.</p> <p>16 (Exhibit No. 84 was marked for</p> <p>17 identification.)</p> <p>18 BY MR. DEUTSCH:</p> <p>19 Q I would like you to take a look at what now has</p> <p>20 been marked as Meadow Exhibit 84. It's a</p> <p>21 document on the first page that reads "PEX</p> <p>22 Development Strategy Jana Program July 2009." It</p> <p>23 encompasses Bates numbers NIBCO Meadow 16630</p> <p>24 through 641.</p> <p>25 If you could take a look at this document</p>	<p style="text-align: right;">Page 128</p> <p>1 Q So you're saying it would be presented to the</p> <p>2 new product committee periodically?</p> <p>3 A Typically, yes.</p> <p>4 Q Okay.</p> <p>5 A Not necessarily a formal presentation; it was</p> <p>6 just a status of it.</p> <p>7 Q Okay. And that would be the target audience you</p> <p>8 would be following through on, on the PEXc</p> <p>9 initiatives, as opposed to other people in</p> <p>10 NIBCO?</p> <p>11 A I'm sorry, I'm not sure I'm following what</p> <p>12 you're asking.</p> <p>13 Q Okay. I'm just trying to follow through on, you</p> <p>14 know, you have the presentation February 2009.</p> <p>15 Now I'm trying to follow who was kept informed</p> <p>16 as to the progress on the PEXc initiatives, you</p> <p>17 know, that were begun in early 2009?</p> <p>18 A Okay. Well, we would have reported on the</p> <p>19 status at the new product development committee.</p> <p>20 Q Now, I look on the third page of this document,</p> <p>21 Meadow 84, and it has "PEX Problem Statement -</p> <p>22 Review," and those seem to be the same problems</p> <p>23 that were -- first two problems that were</p> <p>24 identified in the earlier -- the February</p> <p>25 version of the presentation, which is Meadow 81.</p>
<p style="text-align: right;">Page 127</p> <p>1 and tell me if you recognize it.</p> <p>2 A (Reviewing.)</p> <p>3 No, I don't remember this.</p> <p>4 Q Okay. Do you remember being involved in some</p> <p>5 presentation around this time, July 2009, as</p> <p>6 some kind of follow-up to the February 2009</p> <p>7 presentation to the executives that you were</p> <p>8 involved with?</p> <p>9 A I don't remember.</p> <p>10 Q Okay. Do you have any idea who this</p> <p>11 presentation was made to?</p> <p>12 A I don't remember that document.</p> <p>13 Q Well, after the February 2009 presentation you</p> <p>14 were involved with, were there other</p> <p>15 presentations you were involved with of</p> <p>16 presenting the PEXc program and its development</p> <p>17 to executives at NIBCO?</p> <p>18 A I don't recall specific presentations.</p> <p>19 Q Was there any process of updating the executives</p> <p>20 who had participated in the February 2009</p> <p>21 presentation about the PEXc program?</p> <p>22 A At that point we would have -- it became part of</p> <p>23 our new product development committee reviews,</p> <p>24 right, as we were working on the new product of</p> <p>25 the PEX -- the 3 series PEX tubing.</p>	<p style="text-align: right;">Page 129</p> <p>1 You'd agree with that, right? It still has</p> <p>2 the same two problems? One is risk of losing</p> <p>3 the current third-party certification and a</p> <p>4 question about the product's performance when</p> <p>5 compared to the current chlorine resistance</p> <p>6 standard and code requirements.</p> <p>7 A I'm sorry, I'm just trying -- is your question</p> <p>8 are those the same slides?</p> <p>9 Q Basically, yes. So, in other words, in July of</p> <p>10 2009, those are still the same two problems that</p> <p>11 are being identified for NIBCO, right?</p> <p>12 A I would say that they're the same slides.</p> <p>13 Q Okay.</p> <p>14 (Exhibit No. 85 was marked for</p> <p>15 identification.)</p> <p>16 BY MR. DEUTSCH:</p> <p>17 Q I would like you to take a look at what's been</p> <p>18 marked as Meadow 85. And just to clarify the</p> <p>19 record, this encompasses documents entitled</p> <p>20 Total Meadow 1065 through 1068.</p> <p>21 Now, the Bates numbers were cut off on the</p> <p>22 copy that we have here for you, but I'm just</p> <p>23 making it clear for the record.</p> <p>24 So I would like you to take a look at</p> <p>25 Meadow 85, which on the first page, this is a</p>

<p style="text-align: right;">Page 130</p> <p>1 document from Total Petrochemicals, and it's</p> <p>2 referring to a visitor meeting with NIBCO, and</p> <p>3 you're included among the personnel that</p> <p>4 apparently Total met with. That is, Brian Coe</p> <p>5 apparently from Total.</p> <p>6 Do you remember meeting with Mr. Coe from</p> <p>7 Total?</p> <p>8 A I don't remember the interaction at that point</p> <p>9 in time.</p> <p>10 Q Do you ever remember meeting with anybody from</p> <p>11 Total regarding the PEX products?</p> <p>12 A Well, I remember a couple of -- we most likely</p> <p>13 had a couple conversations with Total because</p> <p>14 they were the current resin supplier. I'm</p> <p>15 not -- I don't remember all the details of it.</p> <p>16 Q Okay. Do you remember any communications to</p> <p>17 Total regarding concerns or dissatisfactions</p> <p>18 with the Total resins?</p> <p>19 A Not that I'm aware of.</p> <p>20 Q Okay. And was there any particular reason why</p> <p>21 NIBCO ceased using Total's resins?</p> <p>22 A Well, the reformulation product utilized a resin</p> <p>23 from Dow.</p> <p>24 Q And why was that, why Dow rather than Total?</p> <p>25 A I don't remember the specifics about it. I know</p>	<p style="text-align: right;">Page 132</p> <p>1 CPI/NIBCO pipe had virtually no measurable AO."</p> <p>2 Now, do you remember any communications or</p> <p>3 discussions with Total about this description of</p> <p>4 NIBCO's experience with its PEXc tubing at this</p> <p>5 time? This is, again, a letter written</p> <p>6 July 2009.</p> <p>7 A No, I don't remember.</p> <p>8 Q Okay. Now, are you aware of any steps taken by</p> <p>9 NIBCO to address these concerns that are</p> <p>10 reflected in this paragraph that we just read</p> <p>11 from Total Petrochemicals?</p> <p>12 A Well, I'm not sure really what you're asking, I</p> <p>13 mean, from that standpoint. Can you say that</p> <p>14 one more time?</p> <p>15 Q Okay. Well, in this paragraph they're referring</p> <p>16 to that CPI/NIBCO pipe had characteristically</p> <p>17 lower OIT performance than competitive grades</p> <p>18 and also that the pipe is less stabilized.</p> <p>19 And so I'm asking: Were there steps taken</p> <p>20 by NIBCO to address these concerns that Total is</p> <p>21 recording here?</p> <p>22 A Well, I believe the answer is yes.</p> <p>23 Q Okay. And what steps were taken to address</p> <p>24 those reflected concerns?</p> <p>25 A I believe as part of the reformulation project</p>
<p style="text-align: right;">Page 131</p> <p>1 we did several rounds of screening/testing with</p> <p>2 different resins and formulations, and I can't</p> <p>3 remember the specifics on why the Dow resin was</p> <p>4 chosen.</p> <p>5 Q If you could turn to page 2 of Meadow 85. It</p> <p>6 has a headline -- it actually says "Call</p> <p>7 Details." So perhaps this reflected a call with</p> <p>8 Total.</p> <p>9 Does that refresh your memory in any way</p> <p>10 about this call or meeting in July of 2009 with</p> <p>11 Total?</p> <p>12 A No, I don't remember those details.</p> <p>13 Q Okay. So in their section "Background" Mr. Coe</p> <p>14 writes -- he says in the second paragraph, "In</p> <p>15 recent years NIBCO had experienced several field</p> <p>16 failures in pipe from CPI vintage. In their</p> <p>17 investigation they learned that CPI/NIBCO pipe</p> <p>18 had characteristically lower OIT performance</p> <p>19 than competitive grades, concluding the pipe is</p> <p>20 less stabilized, although they had passed</p> <p>21 NSF/ASTM chlorine test requirements. They had</p> <p>22 launched a project to improve oxidative</p> <p>23 resistance in their pipe. TPI had provided some</p> <p>24 technical assistance in this effort in</p> <p>25 analytical testing which confirmed that all</p>	<p style="text-align: right;">Page 133</p> <p>1 we tried to develop a better understanding of</p> <p>2 OIT in relationship to chlorine resistance and</p> <p>3 found that it probably wasn't a good measure.</p> <p>4 Q Was there -- in addition to the reformulation,</p> <p>5 was there any effort to improve or correct the</p> <p>6 existing product, the 1006 product, given these</p> <p>7 concerns expressed in this Total letter?</p> <p>8 A Well, I don't believe that there were</p> <p>9 corrections needed.</p> <p>10 Q Okay. Even though they're stating that -- and</p> <p>11 this apparently is based upon communications</p> <p>12 with NIBCO saying that -- has low OIT</p> <p>13 performance and is less stabilized.</p> <p>14 A I believe that's, you know, are working</p> <p>15 theories, not necessarily facts.</p> <p>16 Q They're also commenting that NIBCO's pipe had</p> <p>17 virtually no measurable AO. Is that not a</p> <p>18 concern?</p> <p>19 A I'm -- is what a concern?</p> <p>20 Q They're -- in this letter they're saying the</p> <p>21 product that NIBCO has been selling to the</p> <p>22 market doesn't have antioxidants or measurable</p> <p>23 in it. Wouldn't that be a concern to NIBCO?</p> <p>24 A Well, it depends.</p> <p>25 Q And antioxidants aren't important to maintaining</p>

<p style="text-align: right;">Page 134</p> <p>1 the strength and stability of the pipe?</p> <p>2 A I'm not certain as to their entire role.</p> <p>3 Q Antioxidants?</p> <p>4 A I'm not certain to their role relative to --</p> <p>5 Q Okay. All right. Is there not -- in the</p> <p>6 formulation of the PEX tubing, is there not an</p> <p>7 effort to include antioxidants in the formula?</p> <p>8 A I believe there are.</p> <p>9 Q Okay. And if it was determined that there were</p> <p>10 no measurable antioxidants in the tested pipe,</p> <p>11 would that not be a concern?</p> <p>12 A I'm not certain that that's a factual statement.</p> <p>13 Q Do you think that Total is misstating it here?</p> <p>14 A I don't know what data that they're referring</p> <p>15 to.</p> <p>16 Q Now, in the next paragraph in this letter it</p> <p>17 says, "Jana had recommended that changing to a</p> <p>18 resin with higher slow crack growth resistance</p> <p>19 (PENT) would help improve performance."</p> <p>20 Do you know what "PENT" refers to?</p> <p>21 A "PENT"?</p> <p>22 Q Yes.</p> <p>23 A Not the actual specific acronym, what it stands</p> <p>24 for.</p> <p>25 Q Do you know generally what that's referring to?</p>	<p style="text-align: right;">Page 136</p> <p>1 with Aleesha Valentine sending you an email</p> <p>2 dated September 9, 2009.</p> <p>3 If you could take a look at this document</p> <p>4 and tell me if you recognize it and what it</p> <p>5 concerns.</p> <p>6 A (Reviewing.)</p> <p>7 Okay.</p> <p>8 Q You received this email, right?</p> <p>9 A I'm not certain. I believe since it was printed</p> <p>10 off of mine, but I don't recall it directly.</p> <p>11 Q I assume you had -- during the PEX projects you</p> <p>12 had regular contact with Aleesha Valentine,</p> <p>13 right?</p> <p>14 A There would have been routine conversations,</p> <p>15 phone calls, meetings.</p> <p>16 Q And this one seems to reflect she's following up</p> <p>17 on a call that she had with you, right?</p> <p>18 A I'm not certain of what was ...</p> <p>19 Q Now, in the first -- she's numbered five items</p> <p>20 in this email she's sending you on September 9.</p> <p>21 So the first -- item one she refers to</p> <p>22 somebody named Kelly. Do you know who that is?</p> <p>23 It's the first line of number one.</p> <p>24 A I believe Kelly was an NSF employee.</p> <p>25 Q Okay. Now, did you ever have any direct</p>
<p style="text-align: right;">Page 135</p> <p>1 A PENT is -- basically it's a measure of a</p> <p>2 material as how well that it -- how well cracks</p> <p>3 will propagate throughout the material.</p> <p>4 Q Now, further down in this letter written by</p> <p>5 Total, this meeting details, it says, "Electron</p> <p>6 Beam Irradiation (crosslinking). NIBCO targets</p> <p>7 a gel content (crosslink density) range of</p> <p>8 approximately 68 to 71 percent. The path to</p> <p>9 this level is a function of dosage (intensity of</p> <p>10 irradiation) and rate (line speed through E-beam</p> <p>11 unit, i.e., residence time). They typically</p> <p>12 irradiate CD 4300 with approximately 24 Mrad,</p> <p>13 which they have been led to believe is very high</p> <p>14 (vs 8 to 12 Mrad reported by various sources)."</p> <p>15 Now, does that in any way refresh your</p> <p>16 recollection about the level of Mrad used in</p> <p>17 NIBCO's process for its PEX tubing and concerns</p> <p>18 about what the level of Mrads should be?</p> <p>19 A I don't recall any concerns about the level</p> <p>20 of -- the dosage that's being applied to it.</p> <p>21 (Exhibit No. 86 was marked for</p> <p>22 identification.)</p> <p>23 BY MR. DEUTSCH:</p> <p>24 Q If you can take a look at what's been marked as</p> <p>25 Meadow 86, which is an email chain at the top</p>	<p style="text-align: right;">Page 137</p> <p>1 dealings with Kelly?</p> <p>2 Do you know what her last name was?</p> <p>3 A I do not remember her last name, and she was</p> <p>4 NSF's prime contact for NIBCO.</p> <p>5 Q Okay.</p> <p>6 A At some point in time.</p> <p>7 Q Okay. So did you have some direct dealings with</p> <p>8 Kelly?</p> <p>9 A I have met Kelly. I don't remember all the</p> <p>10 details of any kind of interactions.</p> <p>11 Q Okay. But at this point in time, we're in the</p> <p>12 middle of 2009, you and NIBCO are looking to</p> <p>13 Aleesha Valentine to help manage the process of</p> <p>14 maintaining certifications; is that fair to say?</p> <p>15 A They had been employed to help with the</p> <p>16 certification aspects.</p> <p>17 Q And in number one she concludes that paragraph</p> <p>18 by saying, "We encourage Mark to communicate</p> <p>19 with NSF entirely by email."</p> <p>20 Do you know why she's giving you that</p> <p>21 advice at this point?</p> <p>22 A I don't remember specifically.</p> <p>23 Q Was there any concern by she or you as to the</p> <p>24 way Mark Clark was engaging NSF in the</p> <p>25 certification process?</p>

<p style="text-align: right;">Page 138</p> <p>1 A I don't remember concerns. I don't recall.</p> <p>2 Q Did you ever have any meetings or conversations</p> <p>3 with Mark Clark about the process of</p> <p>4 certifications for NIBCO's PEX products?</p> <p>5 A I'm sure Mark and I had discussed it, but I</p> <p>6 don't recall specifics.</p> <p>7 Q Now, number two of her email to you in this</p> <p>8 Meadow No. 86, she says, "If emails are being</p> <p>9 sent to NSF, please send them to me for review</p> <p>10 first, as we do with IAPMO."</p> <p>11 And did you do that?</p> <p>12 A I don't recall specifically.</p> <p>13 Q Now, in number three of her email to you, in</p> <p>14 item C she says, "If NSF does not agree to</p> <p>15 accept the data or to retain sample, we need to</p> <p>16 get clarification about whether NIBCO is to</p> <p>17 submit a specific sample or whether NSF will</p> <p>18 send an auditor to the plant to collect the</p> <p>19 sample. Actions will be identified for each</p> <p>20 possible scenario."</p> <p>21 What's your understanding of what she's</p> <p>22 referring to there and what's happening in terms</p> <p>23 of the certification process here in September</p> <p>24 of 2009?</p> <p>25 A I'm sorry, where are we at again?</p>	<p style="text-align: right;">Page 140</p> <p>1 products and projects continuously, so no.</p> <p>2 Q So did NIBCO reject Jana's advice on how to deal</p> <p>3 with NSF?</p> <p>4 A I'm not certain. You'd have to be more</p> <p>5 specific. I don't remember all the details of</p> <p>6 everything that was done.</p> <p>7 Q I mean, did anybody say to Aleesha Valentine or</p> <p>8 other people at Jana, no, we think you're</p> <p>9 mistaken about the approach to dealing with NSF</p> <p>10 that they were working with NIBCO to implement?</p> <p>11 A I don't recall anything.</p> <p>12 (Exhibit No. 87 was marked for</p> <p>13 identification.)</p> <p>14 BY MR. DEUTSCH:</p> <p>15 Q If you could take a look at what we've marked as</p> <p>16 Meadow Exhibit 87. It's a one-page document.</p> <p>17 It's Bates number NIBCO Meadow 98927.</p> <p>18 It's dated October 8th, 2009. It's a</p> <p>19 email that you sent. It says "Exchange</p> <p>20 Administrative Group," and then it's directed to</p> <p>21 Gary Wilson, Rick Noel, Chris Mason,</p> <p>22 Randy Doering. The subject is "NSF Status PEX</p> <p>23 Pipe," and you listed it as high importance.</p> <p>24 Could you take a look at this and tell me</p> <p>25 if you recognize this as an email you had sent?</p>
<p style="text-align: right;">Page 139</p> <p>1 Q I'm sorry. At the very bottom of the first page</p> <p>2 she has a subparagraph C to her number three.</p> <p>3 A I'm not certain about it, really.</p> <p>4 Q Now, in the next page of Meadow 86,</p> <p>5 Aleesha Valentine writes in her email to you</p> <p>6 number four and -- first of all, she refers to</p> <p>7 somebody Nassrin. Do you know who that is?</p> <p>8 A Nassrin is an NSF employee.</p> <p>9 Q Have you had any dealings with him?</p> <p>10 A Possibly. I don't recall specifically.</p> <p>11 Q Number four she writes, "Any discussions with</p> <p>12 NSF around the ASTM standard change or NIBCO's</p> <p>13 reformulation project should be avoided if at</p> <p>14 all possible. Discussing the ASTM standard</p> <p>15 change exposes Jana's cards, exposes NIBCO's</p> <p>16 relationship with Jana and could be detrimental</p> <p>17 to our work there."</p> <p>18 Do you have an understanding of why she's</p> <p>19 giving this advice to you -- or she's following</p> <p>20 up on a phone call with you about these issues?</p> <p>21 A Well, yes. I believe it's reflective of Jana's</p> <p>22 distrust of NSF at that point in time.</p> <p>23 Q Okay. Now, did NIBCO share that concern about</p> <p>24 dealing with NSF?</p> <p>25 A We deal with NSF on a significant number of</p>	<p style="text-align: right;">Page 141</p> <p>1 A (Reviewing.)</p> <p>2 I don't remember all of the specifics about</p> <p>3 it.</p> <p>4 Q Okay. But do you remember sending this email?</p> <p>5 A I actually don't remember sending it.</p> <p>6 Q And what's the exchange administrative group?</p> <p>7 A I have no idea.</p> <p>8 Q Okay. The people you sent this to were all</p> <p>9 senior people at NIBCO, right?</p> <p>10 A I don't know what "senior" means.</p> <p>11 Q Well, they -- am I correct in characterizing</p> <p>12 them as they're, at this point in time, on a</p> <p>13 more senior level than you were?</p> <p>14 A Yes.</p> <p>15 Q Okay. And at this point in time you were</p> <p>16 reporting directly to whom?</p> <p>17 A I believe it was Gary Wilson at the time.</p> <p>18 Q Now, was there any response you got from anybody</p> <p>19 you sent this email to about this report you</p> <p>20 were giving them about the NSF status for the</p> <p>21 PEX pipe?</p> <p>22 A I don't recall.</p> <p>23 Q Do you know if NSF ever tested the red pipe as</p> <p>24 part of its process of examining NIBCO's PEX</p> <p>25 pipe for certification?</p>

<p style="text-align: right;">Page 142</p> <p>1 A It would've had to have been done if there was a</p> <p>2 data set in there for the original data.</p> <p>3 Q And they tested red pipe at that time?</p> <p>4 A At what point in time?</p> <p>5 Q Well, we're here -- we're in mid to late 2009.</p> <p>6 A I believe they tested blue tubing at that point</p> <p>7 in time.</p> <p>8 Q Okay. But not red?</p> <p>9 A No.</p> <p>10 Q Now, you write in your email here in the second</p> <p>11 paragraph, "The first quote will be overnighted</p> <p>12 to Jana for immediate chlorine testing. The</p> <p>13 second coil will be shipped (via around the</p> <p>14 world by donkey) to WHQ."</p> <p>15 I guess that's World Headquarters.</p> <p>16 "We are going to delay sending the pipe to</p> <p>17 NSF for approximately three weeks (or until</p> <p>18 October 29, 2009). The delay in shipment to NSF</p> <p>19 (plus additional delays at NSF and starting the</p> <p>20 NSF coil on test at Jana) should allow us to</p> <p>21 receive an indication of the test results prior</p> <p>22 to NSF receiving."</p> <p>23 So why did you employ that strategy at this</p> <p>24 point in time with regards to NSF?</p> <p>25 A Well, we didn't ship it around the world via</p>	<p style="text-align: right;">Page 144</p> <p>1 delay for NSF?</p> <p>2 A The evaluation or the testing would be going in</p> <p>3 parallel; however, if we had an earlier</p> <p>4 indication when the testing concluded, right,</p> <p>5 then we would have an indication of what was</p> <p>6 going to -- NSF was -- the results of NSF were</p> <p>7 going to occur.</p> <p>8 Q In the final paragraph of your email to senior</p> <p>9 personnel you sent this to, you say "The</p> <p>10 positive is that if we pass, our listing should</p> <p>11 be secure for another three years at NSF. With</p> <p>12 the current knowledge I'd give us a 25 percent</p> <p>13 chance of passing."</p> <p>14 Why did you say that? Why 25 percent?</p> <p>15 A Well, I think it was -- I was just speculating,</p> <p>16 right, based upon my knowledge of the DLT</p> <p>17 standards and where they stood at that time and</p> <p>18 the problems that were there, right, relative to</p> <p>19 the standard that Jana was trying to change.</p> <p>20 And anything, quite honestly, that was --</p> <p>21 you know, it was just pure speculation, right,</p> <p>22 which in turn proved to be wrong because it</p> <p>23 passed.</p> <p>24 Q Do you recall getting any reaction from anybody</p> <p>25 you sent this email to after you sent this?</p>
<p style="text-align: right;">Page 143</p> <p>1 donkey. That was a joke.</p> <p>2 Q Okay.</p> <p>3 A It was the -- Jana had recommended -- if I</p> <p>4 remember correctly, Jana had recommended to --</p> <p>5 if within three weeks head start on the testing,</p> <p>6 they would know -- well, should know what's</p> <p>7 going to happen from the test results.</p> <p>8 Q And indeed, that was one of the options that</p> <p>9 Jana put in its seven options, right, was to let</p> <p>10 them test it before letting NSF test it?</p> <p>11 A Well, actually, no. NSF does the testing --</p> <p>12 yes. Well, it would be done to run in parallel.</p> <p>13 Q Well, in this case it would be they would be</p> <p>14 ahead of NSF, right?</p> <p>15 A But the testing would occur in parallel. The</p> <p>16 testing was going to occur for a significant</p> <p>17 amount of time.</p> <p>18 Q Okay. But they would have a three-week head</p> <p>19 start under this plan of your Meadow 87, right?</p> <p>20 A I believe so.</p> <p>21 Q Okay. And the point of that was just to be able</p> <p>22 to have Jana evaluate the pipe before NSF did,</p> <p>23 right?</p> <p>24 A No. It would be done in parallel.</p> <p>25 Q Isn't that the whole point of this three-week</p>	<p style="text-align: right;">Page 145</p> <p>1 A I don't recall.</p> <p>2 Q One would imagine they would be concerned</p> <p>3 getting this because if you didn't have</p> <p>4 certification, you might not be able to sell the</p> <p>5 product, right?</p> <p>6 A Well, I believe that we had already received</p> <p>7 certification for it via IAPMO.</p> <p>8 Q Okay. Then why at this point was there a</p> <p>9 concern about NSF if you already had IAPMO</p> <p>10 certification?</p> <p>11 A I don't really recall. I mean, they're</p> <p>12 competing agencies, right.</p> <p>13 Q Would that be a bad fact -- if you failed one of</p> <p>14 the certifications, even if you had one in</p> <p>15 place, wouldn't that be a bad fact that perhaps</p> <p>16 you even have to disclose to customers?</p> <p>17 A I'm not certain of that because it didn't occur.</p> <p>18 Q Were there ever any conversations at NIBCO as to</p> <p>19 if you had a failed certification, what</p> <p>20 marketing steps the company had to take to deal</p> <p>21 with that problem?</p> <p>22 A I don't recall, that I can remember.</p> <p>23 (Exhibit No. 88 was marked for</p> <p>24 identification.)</p> <p>25 \\\</p>

<p style="text-align: right;">Page 146</p> <p>1 BY MR. DEUTSCH:</p> <p>2 Q If you could take a look at what we've now</p> <p>3 marked as Meadow 88, which is a two-page</p> <p>4 document with Bates numbers NIBCO Meadow 134608</p> <p>5 through 134609.</p> <p>6 It's an email chain that -- you got an</p> <p>7 email from Patrick Vibien dated November 8th,</p> <p>8 2009, concerning NIBCO Jana project meeting.</p> <p>9 If you could take a look at this document</p> <p>10 and confirm that you received it and what it</p> <p>11 concerns.</p> <p>12 A (Reviewing.)</p> <p>13 I don't recall. Honestly, this is an email</p> <p>14 from -- that was received by Joan Platz.</p> <p>15 Q Okay. Well, she -- I think what you mean is</p> <p>16 that name at the top, I guess, indicates it must</p> <p>17 have been printed from her files for this case,</p> <p>18 right?</p> <p>19 A I'm not certain.</p> <p>20 Q Yes. But you're one of the recipients, at least</p> <p>21 as it shows on this email from Vibien to you and</p> <p>22 Chris Mason, Wilson, Platz, Mark Clark, Krazit,</p> <p>23 Steve Noto, Doering, right?</p> <p>24 A I don't recall.</p> <p>25 Q What's Mark Krazit's role at NIBCO during this</p>	<p style="text-align: right;">Page 148</p> <p>1 A I don't remember.</p> <p>2 (Exhibit No. 89 was marked for</p> <p>3 identification.)</p> <p>4 BY MR. DEUTSCH:</p> <p>5 Q If you can take a look at what we've marked as</p> <p>6 Exhibit 89 in the Meadow case. It's a document</p> <p>7 that appears to be printed from your files</p> <p>8 because it has "David Bobo" at the top, and the</p> <p>9 top email in this chain is from Mark Clark to</p> <p>10 you and Aleesha Valentine. Subject is "PEX for</p> <p>11 DLT testing NIBCO" and it encompasses Bates</p> <p>12 numbers NIBCO Meadow 134189 through 134193.</p> <p>13 If you can take a look at this document and</p> <p>14 confirm that you've seen it.</p> <p>15 A (Reviewing.)</p> <p>16 Okay.</p> <p>17 Q Okay. So do you recognize this document?</p> <p>18 A I don't remember the specifics. I mean, you</p> <p>19 know, it's been too long ago.</p> <p>20 Q Okay. But it's printed from your file</p> <p>21 apparently, right?</p> <p>22 A I'm not certain.</p> <p>23 Q Okay. Even though it says "David Bobo" on the</p> <p>24 top of the document?</p> <p>25 A I'm not certain where it came from.</p>
<p style="text-align: right;">Page 147</p> <p>1 time?</p> <p>2 A I don't know of a Mark Krazit.</p> <p>3 Q I'm sorry, Matthew Krazit.</p> <p>4 A Matt Krazit is a product engineer.</p> <p>5 Q Okay. And did he focus on the PEX project?</p> <p>6 A I don't recall specifically Matthew's</p> <p>7 involvement. I don't -- I'm not sure.</p> <p>8 Q Do you know, did he have certain expertise in</p> <p>9 any aspect of the PEX products?</p> <p>10 A Matt has worked on some of the products in the</p> <p>11 past, but I'm not -- I don't recall</p> <p>12 specifically.</p> <p>13 Q Okay. In Vibien's email to you and other</p> <p>14 people, he seems to be memorializing a</p> <p>15 conversation everybody had, and he said, "We</p> <p>16 took away two action items from the meeting.</p> <p>17 Number one, communicate a strategy should the</p> <p>18 blue DLT not pass during the current round of</p> <p>19 chlorine testing. We will work with Dave and</p> <p>20 Mark to pull this strategy together and provide</p> <p>21 strategic options by Friday, November 20th."</p> <p>22 What does that action item concern?</p> <p>23 A I don't recall.</p> <p>24 Q Well, do you recall any -- developing some</p> <p>25 strategic options for the blue pipe not passing?</p>	<p style="text-align: right;">Page 149</p> <p>1 Q Okay. And according to this document produced</p> <p>2 by NIBCO, you're the recipient of the</p> <p>3 December 17th, 2009, email from Mark Clark,</p> <p>4 right? That's at the top?</p> <p>5 A The top one?</p> <p>6 Q Yes.</p> <p>7 A Possibly, I guess.</p> <p>8 Q So if we could start with the first email, which</p> <p>9 is really on page 134191 through 192, it says,</p> <p>10 "The last time I spoke to Nassrin about this</p> <p>11 testing, she indicated that there's a chance the</p> <p>12 pipe will fail the testing based on the original</p> <p>13 data set."</p> <p>14 Do you understand what that's referring to?</p> <p>15 A (Reviewing.)</p> <p>16 I'm not certain. What was your question</p> <p>17 again?</p> <p>18 Q On the second to the last page, I'm looking at</p> <p>19 the way this is written, communication between</p> <p>20 Mark Clark and Kelly Grostefen of NSF where he</p> <p>21 says, "The last time I spoke to Nassrin about</p> <p>22 this testing, she indicated there was a chance</p> <p>23 the pipe will fail the testing based on the</p> <p>24 original data set."</p> <p>25 I'm asking if you have an understanding of</p>

<p style="text-align: right;">Page 150</p> <p>1 what that's referring to.</p> <p>2 A Of which one -- which specifically, the last --</p> <p>3 Q Well, it's referring to -- well, first of all,</p> <p>4 Nassrin, who I think you indicated is an NSF</p> <p>5 person, seems to be indicating that there's</p> <p>6 concern that NIBCO's pipe is going to fail the</p> <p>7 test and it's also referring to the original</p> <p>8 data set.</p> <p>9 So are you familiar with what's being</p> <p>10 discussed here?</p> <p>11 A I mean, they're talking -- looks -- it appears</p> <p>12 that they're talking about the current testing</p> <p>13 that's underway and comparing the results of</p> <p>14 that back to the original data set.</p> <p>15 Q And the original data set was tests done when</p> <p>16 CPI ran the -- you know, was in charge of the</p> <p>17 pipe rather than NIBCO being in charge; is that</p> <p>18 correct?</p> <p>19 A I'm not certain on that because it would have</p> <p>20 been however that data set was generated. I</p> <p>21 don't know.</p> <p>22 Q Okay. Did you ever have occasion to be involved</p> <p>23 with evaluating what the test results of the</p> <p>24 prior CPI pipe had been in terms of having</p> <p>25 NIBCO's pipe certified or recertified?</p>	<p style="text-align: right;">Page 152</p> <p>1 A Well, I think --</p> <p>2 MR. BRADSHAW: I just object to the</p> <p>3 characterization of that, of it as "took it,"</p> <p>4 but you may answer the question.</p> <p>5 THE WITNESS: Well, it's my understanding</p> <p>6 that, you know, like, the agencies perform the</p> <p>7 testing and then issue the certification.</p> <p>8 BY MR. DEUTSCH:</p> <p>9 Q Was there some records that you saw or discussed</p> <p>10 with your staff regarding the certification of</p> <p>11 the CPI-issued pipes?</p> <p>12 A I don't remember specific things as far as the</p> <p>13 testing goes. I mean, again, I'm not exactly</p> <p>14 sure I'm following what you're asking.</p> <p>15 Q Let me ask you this: For a time NIBCO purchased</p> <p>16 its PEXc tubing from CPI, right?</p> <p>17 A I'm not 100 percent sure of the relationship at</p> <p>18 that point in time.</p> <p>19 Q Did anybody ever inform you that there was a</p> <p>20 product DuraPEX that CPI was manufacturing for</p> <p>21 NIBCO for it to sell its PEXc tubing?</p> <p>22 A I'm not certain. I mean, I've heard of the</p> <p>23 DuraPEX name; I don't know what the relationship</p> <p>24 was.</p> <p>25 Q Okay. Now, on the second page of this Meadow 89</p>
<p style="text-align: right;">Page 151</p> <p>1 A I'm not certain I'm sure I'm asking -- I know</p> <p>2 what you're asking.</p> <p>3 Q Okay. Let me try it again.</p> <p>4 So in your role with NIBCO's PEX pipe, did</p> <p>5 you ever have occasion to examine or discuss the</p> <p>6 test data from the period when CPI was in charge</p> <p>7 of the PEX products?</p> <p>8 A I mean, there were conversations about -- you</p> <p>9 know, as we developed a better understanding of</p> <p>10 the PEX tubing and the testing associated with</p> <p>11 it, right, as part of that, as part of the</p> <p>12 reformulation project. So I'm not exactly sure</p> <p>13 what you're asking me here.</p> <p>14 Q Okay.</p> <p>15 A You know, there would have been conversations.</p> <p>16 Q To begin with, I'm just trying to understand</p> <p>17 that there was some historical record of CPI's</p> <p>18 test of its PEX product that were then</p> <p>19 essentially bought or adopted by NIBCO when it</p> <p>20 first took over the CPI business, right?</p> <p>21 A NSF would've had all the test records for that.</p> <p>22 Q Right. So NIBCO at that point was reliant upon</p> <p>23 the tests done during the period when CPI was an</p> <p>24 independent business before NIBCO took it,</p> <p>25 right?</p>	<p style="text-align: right;">Page 153</p> <p>1 there's an email from Kelly Grostefen to</p> <p>2 Mark Clark, December 17th, 2009, where she's</p> <p>3 clarifying to Mark stating, "Our policy states</p> <p>4 that you may not put the NSF mark on any product</p> <p>5 that you know is noncompliant."</p> <p>6 Do you recall any discussions within NIBCO</p> <p>7 about a need to remove or discard product that</p> <p>8 had "NSF" on it due to concerns about whether or</p> <p>9 not the product was compliant?</p> <p>10 A Not to remove product, no.</p> <p>11 Q How about to remove the marking on tubing that</p> <p>12 NIBCO had manufactured?</p> <p>13 A Yes. We took -- for a period of time the "NSF"</p> <p>14 mark was taken off of the tubing. I mean, it</p> <p>15 was for a period of time.</p> <p>16 Q And why was that done?</p> <p>17 A Well, until we had the test results completed,</p> <p>18 right, I believe when the tubing started until</p> <p>19 we got -- we were sure of what was going to</p> <p>20 happen with the tubing.</p> <p>21 Q And what was the time frame when that --</p> <p>22 A I don't remember specifically.</p> <p>23 Q Okay. So this is tubing that already had "NSF"</p> <p>24 on it and then the marking was taken off?</p> <p>25 A No, that's not correct.</p>

<p style="text-align: right;">Page 154</p> <p>1 Q Oh. You mean you just stopped putting "NSF" on</p> <p>2 the tubing?</p> <p>3 A We stopped putting the NSF marks on the tubing.</p> <p>4 Q Okay.</p> <p>5 A For a period of time. Because we had secured</p> <p>6 the IAPMO listing.</p> <p>7 Q Okay. So you're saying that pipe had "IAPMO"</p> <p>8 printed on it rather than "NSF"?</p> <p>9 A It had IAPMO's certification marks printed on</p> <p>10 the tubing.</p> <p>11 Q Okay. Was there a time where you had "IAPMO"</p> <p>12 plus "NSF" on tubing?</p> <p>13 A There would have been times, yes.</p> <p>14 Q Okay. And that would be when both agencies had</p> <p>15 certified the pipe, right?</p> <p>16 A Yes. When the certification was in effect for</p> <p>17 both tubings -- or from both agencies, correct.</p> <p>18 Q And so the event that triggered the need to</p> <p>19 remove "NSF" from the printing was what?</p> <p>20 A I believe it was a recommendation from Jana, but</p> <p>21 I don't recall specifically.</p> <p>22 Q Okay. And that was based on what from Jana?</p> <p>23 A It was -- I don't recall specifically. I</p> <p>24 believe it was just because they had started</p> <p>25 testing the tubing.</p>	<p style="text-align: right;">Page 156</p> <p>1 failure was -- or the product was deemed to be</p> <p>2 noncompliant, then it would impact all of the</p> <p>3 products that were being associated with that.</p> <p>4 Q So in this context it would be they were -- they</p> <p>5 were going to be testing the blue and so the</p> <p>6 concern was whether or not the blue would fail</p> <p>7 and that would sort of undermine certification</p> <p>8 of all the pipe?</p> <p>9 A The concern -- if it was deemed to be</p> <p>10 noncompliant, then yes, it would impact all of</p> <p>11 the products regardless because of how the</p> <p>12 independent/dependent listing process worked.</p> <p>13 Q Now, in the closing sentence of Mark Clark to</p> <p>14 Aleesha and you he says, "To protect against</p> <p>15 this from happening with our PEX, we would need</p> <p>16 to initiate testing of all of the colors soon."</p> <p>17 So did that happen?</p> <p>18 A I don't believe so.</p> <p>19 Q Okay. And why not?</p> <p>20 A Because there wasn't really -- I guess it was</p> <p>21 just a thought process that it wasn't needed.</p> <p>22 MR. BRADSHAW: Can we take a short break?</p> <p>23 MR. DEUTSCH: Sure.</p> <p>24 (A recess was taken from 1:23 p.m. to</p> <p>25 1:32 p.m.)</p>
<p style="text-align: right;">Page 155</p> <p>1 Q On the first page of this Meadow 89, in an email</p> <p>2 to you from Aleesha Valentine, she says, "The</p> <p>3 first sample failed near the EFT."</p> <p>4 What does that mean? What's "EFT"?</p> <p>5 A I think "EFT" means expected failure time, but</p> <p>6 I'm not 100 percent.</p> <p>7 Q Now, in Mark Clark's email to you at the top of</p> <p>8 Meadow 89 in this email chain, December 17th,</p> <p>9 2009, he's directing it to Aleesha Valentine but</p> <p>10 to you as well, he says, "You are correct. If</p> <p>11 the blue fails, the entire PEX line would be</p> <p>12 placed on hold until the reason for the failure</p> <p>13 is resolved."</p> <p>14 What's your understanding of this concern,</p> <p>15 really, at this point in time, December of 2009?</p> <p>16 A I believe that it -- the way in that the</p> <p>17 products are listed, in that it's the</p> <p>18 parent/child relationship and all of the</p> <p>19 products are bracketed together.</p> <p>20 Q Meaning that one of them may have passed the</p> <p>21 certification and, therefore, the related</p> <p>22 products could also be sold?</p> <p>23 A No. It means that whenever they do the</p> <p>24 recertification aspect of it is if the product</p> <p>25 that they're testing was to fail and then that</p>	<p style="text-align: right;">Page 157</p> <p>1 (Exhibit No. 90 was marked for</p> <p>2 identification.)</p> <p>3 BY MR. DEUTSCH:</p> <p>4 Q If you can take a look at what we've marked as</p> <p>5 Meadow 90 in this case, which is -- apparently</p> <p>6 it's printed from your records; it has</p> <p>7 "David Bobo" on the top.</p> <p>8 The top email is from Mark Clark to you</p> <p>9 dated February 27, 2010. It's concerning DLT</p> <p>10 update number 6, and it encompasses Bates</p> <p>11 numbers NIBCO Meadow 134202 through 205.</p> <p>12 If you can take a look at this document and</p> <p>13 tell me if you recognize it and what it</p> <p>14 concerns.</p> <p>15 A (Reviewing.)</p> <p>16 Yeah, I think -- I remember it.</p> <p>17 Q Okay.</p> <p>18 A Somewhat.</p> <p>19 Q And what does it concern?</p> <p>20 A It looks like it's a -- basically, just a status</p> <p>21 update as to where NSF was with their</p> <p>22 recertification.</p> <p>23 Q And in your email to Aleesha Valentine,</p> <p>24 February 25, 2010, you write -- you refer to all</p> <p>25 the testing points are above the LPL or LPI?</p>

<p style="text-align: right;">Page 158</p> <p>1 What is that?</p> <p>2 A I think it's LPL.</p> <p>3 Q And what does that mean?</p> <p>4 A Lower performance limit.</p> <p>5 Q Lower performance limit. Okay.</p> <p>6 And then you conclude that email by saying,</p> <p>7 "My thought is that this is better coming from</p> <p>8 me than from Mark, as I can always play the</p> <p>9 ignorance card."</p> <p>10 So what are you trying to do there?</p> <p>11 A I think it was a joke.</p> <p>12 Q Okay. So this is -- again, this is all part of</p> <p>13 the sequence of you're dealing with Jana and</p> <p>14 particularly Aleesha Valentine over, it looks</p> <p>15 like, almost a year of trying to manage the</p> <p>16 certification processes, right?</p> <p>17 A To learn and to manage, yes.</p> <p>18 (Exhibit No. 91 was marked for</p> <p>19 identification.)</p> <p>20 BY MR. DEUTSCH:</p> <p>21 Q If you can take a look at what I've marked as</p> <p>22 Meadow 91, which on the cover page reads "PEX</p> <p>23 Development Strategy April 2010." It</p> <p>24 encompasses Bates numbers NIBCO Meadow 2774</p> <p>25 through 2780.</p>	<p style="text-align: right;">Page 160</p> <p>1 review meeting."</p> <p>2 At this point in time, this is April 2010,</p> <p>3 what's your understanding of where these</p> <p>4 initiatives then stand?</p> <p>5 A Which -- which initiative?</p> <p>6 Q I guess -- well, on this second bullet point</p> <p>7 where it says, "NSF policy to be modified in</p> <p>8 August NSF policy review meeting" -- let me ask</p> <p>9 you a different question. Forget that.</p> <p>10 At this point in time where you already had</p> <p>11 the IAPMO certification in place, why are there</p> <p>12 still concerns about threats to maintaining the</p> <p>13 product listing?</p> <p>14 A Well, I believe Jana had a general belief that</p> <p>15 the -- that there were problems in the NSF -- or</p> <p>16 the ASTM standards that needed to be addressed</p> <p>17 so -- that were wrong, and that's why they</p> <p>18 continued to work on it.</p> <p>19 Q But this is listed here as part of a strategy to</p> <p>20 maintain the product listing. So if you have</p> <p>21 the IAPMO listing, what's the risk at this point</p> <p>22 in time, April 2010, to being able to sell a</p> <p>23 certified product?</p> <p>24 A Well, there wasn't a risk at that point in time.</p> <p>25 It was more the risk -- or trying to clarify and</p>
<p style="text-align: right;">Page 159</p> <p>1 If you could take a look at this and tell</p> <p>2 me if you recognize this document.</p> <p>3 A (Reviewing.)</p> <p>4 I don't recall the document specifically.</p> <p>5 Q Okay. Do you think you had any part in</p> <p>6 developing this presentation?</p> <p>7 A Possibly. I just don't remember it</p> <p>8 specifically.</p> <p>9 Q Okay. Do you remember making a presentation to</p> <p>10 anybody that incorporated these ideas that are</p> <p>11 reflected in the document?</p> <p>12 A I don't recall.</p> <p>13 Q On the third page of this Meadow 91, at the top</p> <p>14 it reads, "Project A - Maintain Product</p> <p>15 Listing," and below it, it says, "Two-part</p> <p>16 strategy to maintain viability of current PEXc</p> <p>17 pipe while a new PEXc pipe is developed."</p> <p>18 It goes on to say, "Eliminate current and</p> <p>19 potential future threats posed by existing ASTM</p> <p>20 and NSF standards and policies."</p> <p>21 Then you have bullet points below that</p> <p>22 saying, "ASTM standard modified to eliminate</p> <p>23 Upper Performance Limit - Complete."</p> <p>24 And then the second bullet point is "NSF</p> <p>25 policy to be modified at August NSF policy</p>	<p style="text-align: right;">Page 161</p> <p>1 correct some of the standards so that they</p> <p>2 couldn't be misinterpreted, I believe.</p> <p>3 Q Do you know specifically what part of the</p> <p>4 standards Jana was attempting to change that</p> <p>5 would benefit NIBCO?</p> <p>6 A I think it was -- I'm not sure how that -- it</p> <p>7 would've benefited anyone who manufactures PEX</p> <p>8 tubing.</p> <p>9 Q Now, if we turn to page 2778 within this Meadow</p> <p>10 91, there's a document that reads, "Project C -</p> <p>11 E-beam processing improvements."</p> <p>12 And then below that it says, "Determined</p> <p>13 that current formulation (not E-beam processing)</p> <p>14 is limiting product performance."</p> <p>15 Now, do you know what that refers to?</p> <p>16 A Well, it was -- Jana had originally theorized</p> <p>17 that there were something in the E-beam process</p> <p>18 that was potentially impacting the product and</p> <p>19 it was determined that it wasn't.</p> <p>20 Q Okay. But this goes on to really say that the</p> <p>21 current formulation -- not the E-beam</p> <p>22 processing -- is limiting product performance.</p> <p>23 So there's something with the formulation that's</p> <p>24 a concern, right?</p> <p>25 A Not a concern, it was just if we want -- you</p>

<p style="text-align: right;">Page 162</p> <p>1 couldn't achieve a higher classification level</p> <p>2 with the current product; hence, the -- and</p> <p>3 that's the reason why we went with the</p> <p>4 reformulation project.</p> <p>5 Q So you're saying the limiting product</p> <p>6 performance, did that have to do with the</p> <p>7 chlorine resistance of the tubing?</p> <p>8 A Well, yes.</p> <p>9 Q It was a 1 rather than a 3 at that point?</p> <p>10 A It was a 1 and then a 3, and we couldn't get it</p> <p>11 to be a 3 with the current formulation.</p> <p>12 Q Okay. Now, on page 2779 it refers at the top to</p> <p>13 Project B - Replacement PEXc, and the goal</p> <p>14 apparently here is to develop and implement a</p> <p>15 new PEXc product with the chlorine resistance</p> <p>16 rating supporting 100 percent recirculation.</p> <p>17 So at this point in time that was the goal</p> <p>18 of the PEXc replacement project, right?</p> <p>19 A The deliverable was to deliver a level 3.</p> <p>20 However, if we could achieve a level 5, we would</p> <p>21 have -- with the reformulation efforts, then we</p> <p>22 would accept it.</p> <p>23 Q And was NIBCO ever able to produce a product</p> <p>24 that was rated as 5 rather than 3?</p> <p>25 A There's PEXb product that was produced and it's</p>	<p style="text-align: right;">Page 164</p> <p>1 as Meadow 92, which appears to be a document</p> <p>2 produced by Jana. It encompasses Bates numbers</p> <p>3 NIBCO Meadow 134124 through 134131.</p> <p>4 The first page is some kind of chart which</p> <p>5 has as its objective, "Maintain certification of</p> <p>6 PEX product through 2012."</p> <p>7 If you could take a look at this and tell</p> <p>8 me if you recognize this document and what it</p> <p>9 is.</p> <p>10 A (Reviewing.)</p> <p>11 I don't remember specifically the document.</p> <p>12 Q You don't recall seeing this at all?</p> <p>13 A I'm not going to say I haven't seen it; I just</p> <p>14 don't recall specifically.</p> <p>15 Q Okay. Do you remember ever getting a flowchart</p> <p>16 like this to help manage the PEX initiatives by</p> <p>17 NIBCO with Jana participating?</p> <p>18 A I don't recall that specifically.</p> <p>19 Q Okay. Now, on the third page of this document,</p> <p>20 which is 134136, at the top it says, "Option 2,</p> <p>21 NSF does not accept JR data but accepts retained</p> <p>22 sample."</p> <p>23 First of all, what's JR data?</p> <p>24 A I'm not sure.</p> <p>25 Q Okay. And what's retained sample?</p>
<p style="text-align: right;">Page 163</p> <p>1 rated at a level 5.</p> <p>2 Q That NIBCO produced?</p> <p>3 A NIBCO produced a level 5 PEXb product.</p> <p>4 Q And how about the PEXc product?</p> <p>5 A Not to date, no.</p> <p>6 Q Was there ever an understanding as to why level</p> <p>7 5 wasn't achieved for the PEXc product?</p> <p>8 A Well, the test results are what they weren't and</p> <p>9 couldn't support the level 5.</p> <p>10 Q Was there ever an analysis done as to why some</p> <p>11 of the competitors were able to get level 5</p> <p>12 chlorine rating on their PEX products as opposed</p> <p>13 to NIBCO achieving that?</p> <p>14 A Well, as part of the reformulation project, we</p> <p>15 tried to study existing products and tried to</p> <p>16 develop a formulation based upon that, but it</p> <p>17 was accepted that it may take more than one</p> <p>18 iterative on that in order to achieve a level 5.</p> <p>19 Q Is there any current initiative by NIBCO to</p> <p>20 achieve a level 5 with their PEXc product?</p> <p>21 A Not that I'm aware of.</p> <p>22 (Exhibit No. 92 was marked for</p> <p>23 identification.)</p> <p>24 BY MR. DEUTSCH:</p> <p>25 Q If you could take a look at what's been marked</p>	<p style="text-align: right;">Page 165</p> <p>1 A I don't know what that is.</p> <p>2 Q Now, in the next page, which is 134127, up at</p> <p>3 the top it has "NSF Certification" as a</p> <p>4 category. It says, "DLT sample is due this</p> <p>5 year," and then, "Estimated lifetimes from</p> <p>6 original chlorine resistance testing 2005," and</p> <p>7 below that it says, "Red 44 years, orange 47</p> <p>8 years."</p> <p>9 Now, isn't it correct that those figures of</p> <p>10 below 50 years render them inadequate</p> <p>11 performance for those pipes?</p> <p>12 A I don't believe so, no.</p> <p>13 Q And the standard isn't 50 years for the life of</p> <p>14 the pipe as extrapolated from the tests?</p> <p>15 A Say that one more time.</p> <p>16 MR. DEUTSCH: Could you repeat that?</p> <p>17 (The requested text was read by the court</p> <p>18 reporter.)</p> <p>19 THE WITNESS: I believe that the standard</p> <p>20 requires a 50-year minimum extrapolated timeline</p> <p>21 relative to the testing standards that it's</p> <p>22 done.</p> <p>23 BY MR. DEUTSCH:</p> <p>24 Q Okay. So when it says "red 44 years," doesn't</p> <p>25 that indicate it's below the standard of 50</p>

<p style="text-align: right;">Page 166</p> <p>1 years?</p> <p>2 A Well, it must have been deemed compliant</p> <p>3 because, otherwise, the standard -- the</p> <p>4 certification wouldn't have been issued by NSF.</p> <p>5 Q Okay. Was there any change in the standard over</p> <p>6 time to your understanding from, let's say, 2004</p> <p>7 forward to 2012?</p> <p>8 A I'm sorry?</p> <p>9 Q Was there any change in the standard that would</p> <p>10 render from what you're saying that, for</p> <p>11 instance, the red pipe at 44 years might have</p> <p>12 been acceptable earlier but was becoming</p> <p>13 unacceptable due to changes in the standards?</p> <p>14 A I'm not aware of that. I believe that the 44</p> <p>15 years and the reason that it shows that is</p> <p>16 because the red pipe was lasting longer than the</p> <p>17 other colors and, with the combination of the</p> <p>18 data, was negatively impacting the regression.</p> <p>19 Q Okay. Could you explain that in more detail?</p> <p>20 A Probably not.</p> <p>21 Q Okay.</p> <p>22 A Meaning that -- I can try, but I'm not an</p> <p>23 expert, right?</p> <p>24 The data set that shows what the</p> <p>25 extrapolated time is, is a combination of the</p>	<p style="text-align: right;">Page 168</p> <p>1 temp- -- the product is tested at various</p> <p>2 pressures and temperatures to where an</p> <p>3 extrapolated timeline is generated, right?</p> <p>4 So you test for an independent data set, I</p> <p>5 believe that it is a minimum of 12 data points</p> <p>6 at three different pressures and temperatures,</p> <p>7 in which case the extrapolation is occurred from</p> <p>8 that.</p> <p>9 The dependent set is only tested at the</p> <p>10 most aggressive or highest pressure/temperature</p> <p>11 points, in which case that is then merged with</p> <p>12 the original data from the independent testing.</p> <p>13 And that's really only specific to the</p> <p>14 chlorine resistance testing.</p> <p>15 Q Seemed like a fairly thorough response.</p> <p>16 A Well, I'm sure I'm -- I am in no means a</p> <p>17 mathematician, right, relative to that, so I --</p> <p>18 there's probably -- that's my, you know,</p> <p>19 kindergarten level understanding of it.</p> <p>20 Q Now, below where we were just looking, at "NSF</p> <p>21 Certification," there's a section "Notes and</p> <p>22 Questions."</p> <p>23 There's a bullet that says, "Jana should</p> <p>24 have a technical argument to support maintenance</p> <p>25 of certification of other colors which may</p>
<p style="text-align: right;">Page 167</p> <p>1 independent data set and the dependent data set.</p> <p>2 If -- in which case the DLT testing is done at</p> <p>3 the -- I believe the higher pressure and</p> <p>4 temperature limits, and when that is shown in</p> <p>5 combination, if it lasts longer than the data</p> <p>6 set that it's being merged with, it will</p> <p>7 negatively impact the regression.</p> <p>8 So the slope of the line, in essence, will</p> <p>9 become longer, right, or more steep, right, even</p> <p>10 though it lasts at a longer time.</p> <p>11 Q Okay. What's your understanding of the</p> <p>12 difference between the independent test and the</p> <p>13 dependent test? Like, what's involved in each</p> <p>14 category?</p> <p>15 A Well, it's outlined per the standard.</p> <p>16 Q Okay. Can you explain that to me as we sit</p> <p>17 here?</p> <p>18 A I'm not an expert --</p> <p>19 Q Yes.</p> <p>20 A -- right, and I'm going to quantify my</p> <p>21 statements from that standpoint.</p> <p>22 Q Okay.</p> <p>23 A And I have not read the standard in a while --</p> <p>24 Q Okay.</p> <p>25 A -- right, but the -- there are pressures and</p>	<p style="text-align: right;">Page 169</p> <p>1 include DLTs on each color as proof."</p> <p>2 Do you have an understanding what that</p> <p>3 refers to?</p> <p>4 A I'm not 100 percent certain on it but, in</p> <p>5 essence, it's a technical argument as to why</p> <p>6 because one DLT would fail, why is it acceptable</p> <p>7 to reject the entire product line.</p> <p>8 That's my understanding of it.</p> <p>9 Q Now, do you understand what NSF 61 covers?</p> <p>10 A In general terms, yes.</p> <p>11 Q Could you describe that?</p> <p>12 A NSF 61 is a toxicity standard associated with</p> <p>13 the extraction of products that are used in</p> <p>14 polymer water systems.</p> <p>15 Q Now, at the end of this document, the last two</p> <p>16 pages of Meadow 92, it's showing PEXb</p> <p>17 certification.</p> <p>18 Now, what's the advantage or disadvantage</p> <p>19 of PEXb versus PEXc as a product?</p> <p>20 A I don't believe there is an advantage of PEXb</p> <p>21 over PEXc.</p> <p>22 Q Do you think they're just equivalent?</p> <p>23 A I believe that, relative to the standards, PEX</p> <p>24 is PEX.</p> <p>25 Q How about any other -- forget about the</p>

<p style="text-align: right;">Page 170</p> <p>1 certification, just the performance of the</p> <p>2 products. Is there some differentiation between</p> <p>3 PEXb and PEXc?</p> <p>4 A PEXb and PEXc are PEX. You can have products</p> <p>5 tested to generate whatever level certification</p> <p>6 that you're entitled, that you want to.</p> <p>7 Q Is it less expensive to produce PEXc than PEXb?</p> <p>8 A I don't have the numbers off the top of my head</p> <p>9 to know exactly. They're very competitive</p> <p>10 products.</p> <p>11 (Exhibit No. 93 was marked for</p> <p>12 identification.)</p> <p>13 BY MR. DEUTSCH:</p> <p>14 Q I would like you to take a look at what we've</p> <p>15 marked as Meadow Exhibit 93. This is a document</p> <p>16 on the first page reads, "Project 09-1159</p> <p>17 Compilation Report E-beam Process Improvement."</p> <p>18 It shows "Jana" on the cover page, and the</p> <p>19 document encompasses NIBCO Meadow 16181 through</p> <p>20 16509.</p> <p>21 So I would like you to take a look at this,</p> <p>22 tell me if you recognize this document, and if</p> <p>23 so, what is it?</p> <p>24 A (Reviewing.)</p> <p>25 I remember the document, but I don't</p>	<p style="text-align: right;">Page 172</p> <p>1 Q Do you know if anybody else had any reaction</p> <p>2 they shared with this report?</p> <p>3 A I'm -- can you help me understand what you mean</p> <p>4 by "reaction"?</p> <p>5 Q Well, I mean, this apparently was produced by</p> <p>6 Jana, circulated to NIBCO, because it's a NIBCO</p> <p>7 project. So I'm just really asking how did</p> <p>8 people react to this report? Did they change</p> <p>9 any practices? Did they reject the findings?</p> <p>10 Any reaction?</p> <p>11 A I don't remember specifically.</p> <p>12 Q So if we turn to the second page of this, 16182,</p> <p>13 which is an executive summary, and it states in</p> <p>14 the second paragraph, "The impetus for this</p> <p>15 project was to resolve the difficulties</p> <p>16 experienced by NIBCO in reliably meeting the NSF</p> <p>17 standard 14 dependent listing transfer (DLT)</p> <p>18 requirements with their current product in</p> <p>19 anticipation of a next generation PEXc product</p> <p>20 currently under development. The difficulty was</p> <p>21 hypothesized to be due to variability in the</p> <p>22 NIBCO product, specifically the oxidation</p> <p>23 induction time (OIT) and crosslink levels as</p> <p>24 demonstrated by previous Jana projects, 07-2169</p> <p>25 and 08-3777."</p>
<p style="text-align: right;">Page 171</p> <p>1 remember all of the specifics about it.</p> <p>2 Q But you received this, right?</p> <p>3 A I believe we did. I don't remember the timing</p> <p>4 of it.</p> <p>5 Q Besides you getting a copy, who else within</p> <p>6 NIBCO received a copy of this to your</p> <p>7 understanding?</p> <p>8 A I'm not -- I don't remember who received a copy.</p> <p>9 Q Now, do you know who initiated the idea of this</p> <p>10 E-beam process improvement?</p> <p>11 A Well, it was initiated -- or it was one of</p> <p>12 Jana's recommendations.</p> <p>13 Q And who approved going ahead with the E-beam</p> <p>14 process improvement?</p> <p>15 A It would have been approved at the same time</p> <p>16 that the reformulation project was approved.</p> <p>17 Q Okay. So was that part of -- we looked at --</p> <p>18 there was the meeting held in February of 2009</p> <p>19 covering, you know, various PEX initiatives. So</p> <p>20 would that have been approved at that time?</p> <p>21 A To the best of my recollection.</p> <p>22 Q Now, did you have any reaction to any of the</p> <p>23 findings in this report?</p> <p>24 A I don't remember all of the details of the</p> <p>25 report.</p>	<p style="text-align: right;">Page 173</p> <p>1 So on that -- well, first of all, on that</p> <p>2 statement, have you seen these other Jana</p> <p>3 projects that are listed here?</p> <p>4 A I'm not sure what those projects are.</p> <p>5 Q And you're not sure what they're about, I take</p> <p>6 it?</p> <p>7 A I don't -- I don't know what those projects are.</p> <p>8 Q Do you have any idea what Jana's -- how long</p> <p>9 NIBCO's worked with Jana?</p> <p>10 A I don't know the extent of the relationship.</p> <p>11 Q But it predates your arriving at NIBCO?</p> <p>12 A I assume. I don't know.</p> <p>13 Q And do you disagree with the -- with what I just</p> <p>14 read here, where Jana is describing the basis</p> <p>15 for this E-beam project that is reflected in</p> <p>16 this Meadow 93?</p> <p>17 A Well, knowing what I know now, yes, I would</p> <p>18 disagree with portions of it.</p> <p>19 Q Okay. What would you disagree with now?</p> <p>20 A Well, the impetus for the project, I wouldn't</p> <p>21 necessarily say -- I would not characterize the</p> <p>22 impetus for the project as being the result of</p> <p>23 difficulties experienced by NIBCO in reliably</p> <p>24 meeting the NSF standard. I would not.</p> <p>25 Q And how would you differ from what Jana is</p>

<p style="text-align: right;">Page 174</p> <p>1 presenting to NIBCO here?</p> <p>2 A Well, in essence, I believe that we really</p> <p>3 wanted to understand the E-beam process better</p> <p>4 inside of NIBCO, and that's how I would</p> <p>5 characterize it.</p> <p>6 Q Do you know if anybody responded to Jana and</p> <p>7 said we think you've misunderstood what this</p> <p>8 assignment is?</p> <p>9 A I don't recall.</p> <p>10 Q So, again on this page, a little further down it</p> <p>11 says, "The findings of the project are," and</p> <p>12 then it has three items.</p> <p>13 One of the items -- number three says, "The</p> <p>14 variability associated with the current NIBCO</p> <p>15 product is a combination of the inherent</p> <p>16 material properties in the inherent variability</p> <p>17 associated with electron irradiation. The</p> <p>18 current formulation appears to be more sensitive</p> <p>19 to the radiation process than other competitive</p> <p>20 materials."</p> <p>21 So that appears to be the basis of, you</p> <p>22 know, what Jana concluded here, right?</p> <p>23 A I'm not certain.</p> <p>24 Q In looking at this, do you know if other -- if</p> <p>25 the other competitors of NIBCO's PEXc product</p>	<p style="text-align: right;">Page 176</p> <p>1 processes through the E-beam equipment; i.e., in</p> <p>2 terms of as it processes through the equipment,</p> <p>3 the tubing goes in multiple layers. And so</p> <p>4 where one tube is over the top of another tube,</p> <p>5 or partially over the top of another tube, could</p> <p>6 that impact the E-beam process. Or the tubing.</p> <p>7 Q Okay. So on the next page, which is -- it's</p> <p>8 page 2 of 329, and it's Bates number 161863, it</p> <p>9 states "Project Objectives."</p> <p>10 And here it's saying, "The primary</p> <p>11 objective of this project was to reduce the</p> <p>12 observed variability in OIT and crosslink levels</p> <p>13 in the NIBCO product, which was believed to be</p> <p>14 affecting NIBCO's ability to reliably meet the</p> <p>15 NSF Standard 14 Dependent Listing Transfer (DLT)</p> <p>16 test requirements."</p> <p>17 Do you know if that objective was met?</p> <p>18 A I'm not certain because I believe that we, as</p> <p>19 part of working on this and then trying to</p> <p>20 understand the OIT, that we discounted its</p> <p>21 importance as we moved through the project.</p> <p>22 Q The importance of OIT?</p> <p>23 A As a reliable measurement and correlation.</p> <p>24 Q And how was it determined that NIBCO decided</p> <p>25 that was not a reliable determinative of product</p>
<p style="text-align: right;">Page 175</p> <p>1 were using E-beam technology?</p> <p>2 A By definition, PEXc must use.</p> <p>3 Q Okay. And which competitors used -- made PEXc?</p> <p>4 A I believe they're prim- -- well, I believe that</p> <p>5 there is several companies in Europe that</p> <p>6 manufacture PEXc.</p> <p>7 Q But nobody in the United States?</p> <p>8 A I'm not going to sit here and say what everybody</p> <p>9 does in the United States, right. I do know</p> <p>10 that there are other E-beam facilities out there</p> <p>11 making variations of PEX via PEXc.</p> <p>12 Q Now, in this document on the same page, it</p> <p>13 refers to a term "shadowing." Do you know what</p> <p>14 that's referring to?</p> <p>15 A Which specifically?</p> <p>16 Q Okay, I'm sorry. Towards the end, the bottom of</p> <p>17 the page where it says, "Based on the testing</p> <p>18 and analysis completed in this project, the</p> <p>19 following recommendations are made."</p> <p>20 And then in number one it has the term</p> <p>21 "shadowing" that's used in there.</p> <p>22 A The shadowing that -- it was another theory that</p> <p>23 Jana had, that some -- that the variation or</p> <p>24 some type of differences in the pipe or tubing</p> <p>25 could be associated with the way that the tubing</p>	<p style="text-align: right;">Page 177</p> <p>1 quality?</p> <p>2 A Well, I don't remember specifically on that; I</p> <p>3 just remember the general conversations or</p> <p>4 consensus that OIT did. It was not a very</p> <p>5 useful measurement.</p> <p>6 Q Now, did Jana ultimately agree with your view</p> <p>7 that OIT was not a good measurement tool?</p> <p>8 A I'm not certain if Jana did or not. I don't</p> <p>9 recall.</p> <p>10 Q Now, on page 1619 of this document --</p> <p>11 MR. BRADSHAW: Excuse me, 16?</p> <p>12 MR. DEUTSCH: 16191, I'm sorry.</p> <p>13 BY MR. DEUTSCH:</p> <p>14 Q Still in Meadow 93. It has a section</p> <p>15 "Irradiation Trials." And number two within</p> <p>16 that says, "The total dose supplied to the pipe</p> <p>17 was high compared to industry benchmarks.</p> <p>18 Current NIBCO formulation is irradiated to a</p> <p>19 total dose between 24 and 28 Mrad, whereas based</p> <p>20 on industry feedback it appeared that</p> <p>21 approximately 12 to 18 Mrad should be sufficient</p> <p>22 for the cross-linking of polyethylene."</p> <p>23 So do you see that?</p> <p>24 A Yes.</p> <p>25 Q And do you have any reason to disagree with</p>

<p style="text-align: right;">Page 178</p> <p>1 that?</p> <p>2 A Disagree with what?</p> <p>3 Q Well, I guess it's asserting that NIBCO is using</p> <p>4 a high Mrad level as opposed to what they're</p> <p>5 saying the industry normally uses?</p> <p>6 A Industry use -- industry -- I'm not sure what</p> <p>7 they're meaning by that, but I do know that it</p> <p>8 does take the 24 to 28 megarads to exceed with</p> <p>9 the PEX 1006 formulation to achieve acceptable</p> <p>10 gel level results.</p> <p>11 Q By that you mean gel level results above</p> <p>12 65 percent?</p> <p>13 A Per the standard, yes.</p> <p>14 Q Now, if you turn to page 16201, which are the</p> <p>15 appendixes to this report.</p> <p>16 On page 16202 it shows the project team for</p> <p>17 this E-beam process improvement project. So it</p> <p>18 has -- one of the participants is Matt Krazit.</p> <p>19 What was his role in this project?</p> <p>20 A I don't remember for sure. I don't believe Matt</p> <p>21 was involved for an extended period of time. I</p> <p>22 can't remember for sure. He may have been</p> <p>23 someone that had been designated to become more</p> <p>24 involved with the E-beam process, but I'm not</p> <p>25 sure that that continued.</p>	<p style="text-align: right;">Page 180</p> <p>1 "The OIT curves for the current NIBCO product</p> <p>2 are less uniform than the competitive samples."</p> <p>3 So upon receiving this report, were these</p> <p>4 concerns addressed in any way?</p> <p>5 A I'm not sure they were concerns.</p> <p>6 Q Okay. You don't think that was Jana indicating</p> <p>7 that NIBCO's product was performing a lower</p> <p>8 level than the competitors?</p> <p>9 A Not necessarily, no.</p> <p>10 Q And you say that because your view is that the</p> <p>11 OIT test is not valid?</p> <p>12 A No, because it was being benchmarked against</p> <p>13 3006 or 5006 product.</p> <p>14 Q You mean the competitive products that were used</p> <p>15 in these tests and comparisons were the</p> <p>16 competitors' 3 and 5 products, whereas NIBCO's</p> <p>17 was the number-one-rated product?</p> <p>18 A I believe it was -- actually, I believe it was</p> <p>19 primarily 5006, level 5 product, versus our</p> <p>20 level 1, but I can't be for sure. I'd have to</p> <p>21 go back and study all 329 pages.</p> <p>22 Q Okay. Now, if we turn to 16205, this is</p> <p>23 entitled "Final Report" at the top. And it has</p> <p>24 "Problem Statement." 2.0.</p> <p>25 It says, "Analysis of the current NIBCO PEX</p>
<p style="text-align: right;">Page 179</p> <p>1 Q Okay. In the project team it also shows</p> <p>2 consultants. Were those people involved in this</p> <p>3 project?</p> <p>4 A We had talked with those people in relationship</p> <p>5 to trying to better understand the E-beam</p> <p>6 process.</p> <p>7 Q And what did you learn from them?</p> <p>8 A I'm not certain.</p> <p>9 Q Okay. And who is IBA Industrial?</p> <p>10 A IBA Industrial is a company that manufactures</p> <p>11 the E-beam irradiation equipment.</p> <p>12 Q And where is IBA Industrial located?</p> <p>13 A They have a U. S. facility I believe in</p> <p>14 Rhode Island, but I believe their corporate</p> <p>15 headquarters is in Belgium, but I'm not 100</p> <p>16 percent certain.</p> <p>17 Q So turning to the next page, which is Appendix</p> <p>18 B, that reads at the top "Comparison of Current</p> <p>19 Irradiation Practice to Theory," it goes down</p> <p>20 into the document and says, "Based on the</p> <p>21 analysis, the following was observed."</p> <p>22 And then the second bullet point says, "The</p> <p>23 OIT of the current NIBCO product is shorter than</p> <p>24 the competitive samples."</p> <p>25 And then the bullet point below it says,</p>	<p style="text-align: right;">Page 181</p> <p>1 tubing indicates critically low residual</p> <p>2 thermo-oxidative resistance at the inner pipe</p> <p>3 surface with adequate stabilization through the</p> <p>4 bulk. This results in marginal and variable</p> <p>5 product quality as assessed by chemical</p> <p>6 oxidative tests."</p> <p>7 Do you know if any steps were taken by</p> <p>8 NIBCO with its current 1006 product at this time</p> <p>9 to address the problem identified here?</p> <p>10 A I'm not sure it's being addressed as being</p> <p>11 identified as a problem.</p> <p>12 Q You wouldn't agree that when it says,</p> <p>13 "Critically low residual thermo-oxidative</p> <p>14 resistance at the lower inner pipe surface"</p> <p>15 indicates a problem?</p> <p>16 A No, because the product had been deemed</p> <p>17 acceptable by meeting and complying with the</p> <p>18 standards.</p> <p>19 Q But Jana is going on to say, "This results in</p> <p>20 marginal and variable product quality."</p> <p>21 That's not a concern for the manufacturer?</p> <p>22 A I'm not sure that that -- what they mean by</p> <p>23 that.</p> <p>24 Q Okay. But upon receiving this, did anybody look</p> <p>25 at this and say, wow, we need to do a few things</p>

<p style="text-align: right;">Page 182</p> <p>1 with our product to make sure we're matching the</p> <p>2 competition?</p> <p>3 A Well, that's why we were under the reformulation</p> <p>4 project, to have a new product.</p> <p>5 Q Reflective of this product is underperforming</p> <p>6 relative to the competitors', right?</p> <p>7 A Well, they had a level 5 -- some of them had a</p> <p>8 level 5 and we were at a level 1.</p> <p>9 Q Now, I realize -- I think you've testified you</p> <p>10 don't necessarily abide by the OIT results that</p> <p>11 NIBCO's looked at in its PEXc products, but</p> <p>12 could you tell me what your understanding of the</p> <p>13 standard for OIT is anyway? Like at what level</p> <p>14 is it an acceptable number and what below is at</p> <p>15 least viewed as an unacceptable number?</p> <p>16 A I don't believe that there is such a thing.</p> <p>17 Q Okay. If you can turn to page 16505 of this</p> <p>18 Meadow 93, and this is a page that is entitled</p> <p>19 "Conclusions of this Report."</p> <p>20 A Sorry.</p> <p>21 Q Page 16505. Okay.</p> <p>22 And so in this conclusions it lists nine</p> <p>23 items here that is -- there are additional</p> <p>24 measures that should be reviewed, considered,</p> <p>25 and implemented according to Jana.</p>	<p style="text-align: right;">Page 184</p> <p>1 identification.)</p> <p>2 BY MR. DEUTSCH:</p> <p>3 Q If you can take a look at what we've marked as</p> <p>4 Meadow 94. It's an email at the top from you to</p> <p>5 Gary Wilson, Rick Noel, Andrew Granzow,</p> <p>6 Matt Krazit and Randy Doering. The subject is</p> <p>7 "Dezincification of Brass Alloys," and it</p> <p>8 encompasses Bates numbers 24743 through 24745.</p> <p>9 Would you take a look at this and tell me</p> <p>10 if you recognize this email that you sent.</p> <p>11 A (Reviewing.)</p> <p>12 I don't recall it.</p> <p>13 Q Do you recall being involved with issues of</p> <p>14 dezincification regarding brass fittings of</p> <p>15 NIBCO?</p> <p>16 A I don't recall issues with the dezincification.</p> <p>17 Q Were there ever any discussions within NIBCO</p> <p>18 that you're aware of, of how to address the</p> <p>19 problem of dezincification of brass fittings</p> <p>20 that NIBCO had sold?</p> <p>21 A I don't remember a conversation about that.</p> <p>22 There were changes to the standards relative to</p> <p>23 PEX fittings, and I recall projects where we</p> <p>24 undertook to have a product that was now</p> <p>25 noncompliant with that, but I don't recall a</p>
<p style="text-align: right;">Page 183</p> <p>1 Do you know which of these were done by</p> <p>2 NIBCO?</p> <p>3 A I don't recall.</p> <p>4 Q Do you know if any of them were implemented?</p> <p>5 A I am not -- I don't recall.</p> <p>6 Q Okay. Do you know if number five of these</p> <p>7 conclusions which says, "Perform more frequent</p> <p>8 crosslink testing to establish and understand</p> <p>9 the cyclical and temporal variation of crosslink</p> <p>10 levels, and to be in agreement with the ASTM</p> <p>11 F876/NSF 14 standards."</p> <p>12 Do you know if more frequent cross-link</p> <p>13 testing was done subsequent to this report being</p> <p>14 issued by Jana to NIBCO?</p> <p>15 A I do know that routine gel level testing is</p> <p>16 conducted; I'm not -- I don't know the -- how</p> <p>17 often that it's done.</p> <p>18 Q When you say "routine," do you have an idea of</p> <p>19 what the frequency of testing or the amount of</p> <p>20 testing that was done before this report?</p> <p>21 A I am not certain.</p> <p>22 Q Okay. Or whether or not it increased after this</p> <p>23 report?</p> <p>24 A I am not certain.</p> <p>25 (Exhibit No. 94 was marked for</p>	<p style="text-align: right;">Page 185</p> <p>1 whole lot of conversation relative to any kind</p> <p>2 of problems.</p> <p>3 Q Okay. When you say there was a change in the</p> <p>4 standards, when did that occur?</p> <p>5 A I'm not certain. I don't recall.</p> <p>6 Q Approximately?</p> <p>7 A Well, between October 21st of 2008 -- I'm not</p> <p>8 trying to be -- I just -- I don't recall</p> <p>9 specifically --</p> <p>10 Q Okay.</p> <p>11 A -- when those -- those changes occurred.</p> <p>12 Q And so when you say there were changes in the</p> <p>13 standard, did NIBCO then change the way it</p> <p>14 produced the brass fittings?</p> <p>15 A We're not pro- -- we didn't produce the brass</p> <p>16 fittings.</p> <p>17 Q Oh. Those were acquired from other producers,</p> <p>18 right?</p> <p>19 A They were sourced from other manufacturers.</p> <p>20 Q Okay. And which sources did NIBCO use?</p> <p>21 A I don't remember all of the sources.</p> <p>22 Q Was Linx one of them?</p> <p>23 A I'm not certain. I remember that name, but I</p> <p>24 don't know exactly which -- what products were</p> <p>25 sourced from them.</p>

<p style="text-align: right;">Page 186</p> <p>1 Q Or IDC?</p> <p>2 A We buy a lot of products from IDC. I don't</p> <p>3 remember all of them.</p> <p>4 Q How about from Mueller Brass, who's included in</p> <p>5 this email chain, Meadow 94?</p> <p>6 A I don't -- I don't remember anything -- I mean,</p> <p>7 we buy products, not necessarily PEX products,</p> <p>8 from Mueller, so I'm not sure what products are</p> <p>9 purchased from whom.</p> <p>10 Q So after -- do you have any idea after this</p> <p>11 email you sent, December 2010, was there any</p> <p>12 efforts to address the concern over</p> <p>13 dezincification which, if I understand your</p> <p>14 testimony, would be the materials you're</p> <p>15 sourcing from some of these other producers,</p> <p>16 right?</p> <p>17 A Okay. I'm not sure what your question is.</p> <p>18 Q Okay. My question would be -- or my question</p> <p>19 is: Were there steps taken with the companies</p> <p>20 you sourced from to address the dezincification</p> <p>21 concerns that were appearing in the marketplace?</p> <p>22 A I'm not certain that there were concerns. I</p> <p>23 mean, we took steps to have product that was in</p> <p>24 compliance with the changing of the product</p> <p>25 standards.</p>	<p style="text-align: right;">Page 188</p> <p>1 A PEX fittings?</p> <p>2 Q Yes.</p> <p>3 A I'm not certain on the details of all of those.</p> <p>4 I mean, we manufacture a lot of fittings. Some</p> <p>5 of them could be used in PEX applications. I</p> <p>6 mean, we manufacture wrought, we manufacture</p> <p>7 cast product, we manufacture -- I'm not certain</p> <p>8 where -- all of the different configurations of</p> <p>9 those, but the primary PEX metal fittings,</p> <p>10 right, were primarily purchased.</p> <p>11 (Exhibit No. 95 was marked for</p> <p>12 identification.)</p> <p>13 BY MR. DEUTSCH:</p> <p>14 Q If you could take a look at what we've marked as</p> <p>15 Meadow 95, which is a two-page document Bates</p> <p>16 numbers 27651 through 27652. It's an email</p> <p>17 chain that you're included in.</p> <p>18 If you can take a look at this and tell me</p> <p>19 if you recognize the emails that you're involved</p> <p>20 with here and what it concerns.</p> <p>21 A (Reviewing.)</p> <p>22 I don't recall what this is for.</p> <p>23 Q Now, in this document, the first page, it refers</p> <p>24 to the NPC meeting. What is that?</p> <p>25 A It's the new product development committee</p>
<p style="text-align: right;">Page 187</p> <p>1 Q You had some testing protocol that made sure the</p> <p>2 newer fittings you were getting complied with</p> <p>3 the new standards to avoid dezincification?</p> <p>4 A Well, I believe that there are changes into the</p> <p>5 fitting standard that required dezincification,</p> <p>6 resistant alloys, and I believe that -- I know</p> <p>7 we undertook projects to -- with suppliers that</p> <p>8 may have been new suppliers, that may have been</p> <p>9 existing suppliers, I don't remember, but</p> <p>10 relative to having product that was compliant.</p> <p>11 Q Was there some initiative to try to determine</p> <p>12 what to do with the fittings that had already</p> <p>13 been received by NIBCO and sold to the public</p> <p>14 that potentially had a risk of dezincification?</p> <p>15 A I am not aware of issues or anything associated</p> <p>16 with that.</p> <p>17 Q Just so I'm clear, what PEX fittings did NIBCO</p> <p>18 manufacture?</p> <p>19 A Well, recently we started manufacturing the PEX</p> <p>20 poly fittings.</p> <p>21 Q In other words, made out of plastic?</p> <p>22 A They're made out of polyphenylsulfone.</p> <p>23 Q Okay. And how about any other fittings that</p> <p>24 NIBCO manufactured prior to these plastic ones</p> <p>25 you just mentioned?</p>	<p style="text-align: right;">Page 189</p> <p>1 meeting.</p> <p>2 Q Do you remember having any dealings with</p> <p>3 Asia Union over fittings?</p> <p>4 A I don't recall specifically or directly.</p> <p>5 Q Okay. Do you remember having any business</p> <p>6 dealings with Asia Union?</p> <p>7 A I know NIBCO has purchased product from them in</p> <p>8 the past, I believe. I don't know specifics.</p> <p>9 Q Do you have an idea what -- on the second page</p> <p>10 where it says, "Asia Union fittings have had</p> <p>11 some unacceptable results from the materials</p> <p>12 analysis completed to date," do you know what</p> <p>13 kind of tests NIBCO would do with the fittings</p> <p>14 that just -- for its PEX products?</p> <p>15 A Well, typically there's a lot of testing that is</p> <p>16 done. Material tests would have been stress</p> <p>17 corrosion cracking testing and dezincification</p> <p>18 testing.</p> <p>19 Q Would they be testing a sample of the fittings</p> <p>20 that come in with certain specific tests?</p> <p>21 A If there was an objective to purchase product</p> <p>22 from them, they would have been tested prior to</p> <p>23 purchasing the product.</p> <p>24 Q Okay. But once you're getting in the shipments,</p> <p>25 is there some process to test and make sure</p>

<p style="text-align: right;">Page 190</p> <p>1 they're compliant with what you were expecting?</p> <p>2 A There are different things. I mean, over what</p> <p>3 time period are you talking about? I mean, we</p> <p>4 continually look at and evaluate and try to</p> <p>5 change and improve. So I'm not certain exactly</p> <p>6 what was being done when.</p> <p>7 Q How about around this time period, March 2013,</p> <p>8 when you get this email from Andrew Granzow?</p> <p>9 A As I said, I'm not certain what this is in</p> <p>10 regards to, so I'm not really sure what it's --</p> <p>11 it could be just something that we pulled</p> <p>12 product in and -- I just don't know what it is.</p> <p>13 Q Do you know when it refers to thermocyclic tests</p> <p>14 what that is?</p> <p>15 A Yeah. In the PEX fitting standards, there are</p> <p>16 thermocycling testing requirements.</p> <p>17 Q Okay. And do you know what's involved in doing</p> <p>18 that test?</p> <p>19 A In general. I don't have the standard</p> <p>20 memorized, but in general, it's an air test</p> <p>21 and -- where the product is moved back and forth</p> <p>22 between ambient, or slightly cooler than ambient</p> <p>23 temperatures, to elevated temperatures.</p> <p>24 Q Are you aware of any fittings being returned to</p> <p>25 NIBCO after they've been sold into the stream of</p>	<p style="text-align: right;">Page 192</p> <p>1 if we could characterize if that alloy would be</p> <p>2 dezincification resistant or not.</p> <p>3 Q Okay.</p> <p>4 A To be in compliance with the standard.</p> <p>5 Q Were there other potential suppliers that you</p> <p>6 were testing besides IDC and Longda in this</p> <p>7 analysis?</p> <p>8 A I believe that there were products tested</p> <p>9 from -- of the same alloy from other suppliers.</p> <p>10 I don't remember the specifics on it, but I</p> <p>11 believe there were other suppliers as well</p> <p>12 utilizing the same alloy. It was an</p> <p>13 investigation to see whether or not that we</p> <p>14 could utilize that alloy and have a compliant</p> <p>15 product.</p> <p>16 Q And what was the conclusion from those tests?</p> <p>17 A Well, this was, I believe, if I remember</p> <p>18 correctly, and it was a 46500 material that we</p> <p>19 couldn't -- that did not appear to be where it</p> <p>20 could routinely pass the 200-micron limit</p> <p>21 associated with the dezincification</p> <p>22 requirements.</p> <p>23 Q Okay. Now, ultimately how did NIBCO address the</p> <p>24 concerns over dezincification of brass fittings?</p> <p>25 A Well, like I said, I'm not sure that there were</p>
<p style="text-align: right;">Page 191</p> <p>1 commerce due to dezincification?</p> <p>2 A I don't know for sure.</p> <p>3 Q And who would know the answer to that?</p> <p>4 A I'm not certain, but I believe that any returns</p> <p>5 would have records.</p> <p>6 Q Like in the PER system?</p> <p>7 A I believe so.</p> <p>8 (Exhibit No. 96 was marked for</p> <p>9 identification.)</p> <p>10 BY MR. DEUTSCH:</p> <p>11 Q If you can take a look at what we've marked as</p> <p>12 Meadow 96, which encompasses Bates numbers</p> <p>13 135930 through 135934. It's an email chain, and</p> <p>14 you're sent an email from Earl Sexton, March 14,</p> <p>15 2013.</p> <p>16 If you could take a look at this and tell</p> <p>17 me if you recognize this email that you received</p> <p>18 and what it concerns.</p> <p>19 A (Reviewing.)</p> <p>20 I don't remember the specifics of this one.</p> <p>21 Q Okay. Do you remember anything about it?</p> <p>22 A I'm not going to say anything for certain, but I</p> <p>23 believe we were doing a testing of fittings from</p> <p>24 different suppliers and seeing if -- from</p> <p>25 different suppliers of a particular alloy to see</p>	<p style="text-align: right;">Page 193</p> <p>1 concerns. Like I said, we changed -- I believe</p> <p>2 that we changed alloys and potentially</p> <p>3 manufacturers to be in compliance with the</p> <p>4 standards. Both the dezincification requirement</p> <p>5 as well as the nationwide lead-free</p> <p>6 requirements.</p> <p>7 Q And so where does NIBCO source those fittings</p> <p>8 from now?</p> <p>9 A I don't remember the sources off the top of my</p> <p>10 head.</p> <p>11 (Exhibit No. 97 was marked for</p> <p>12 identification.)</p> <p>13 BY MR. DEUTSCH:</p> <p>14 Q If you could take a look at what we've marked as</p> <p>15 Meadow No. 97. It's a document encompassing</p> <p>16 Bates numbers NIBCO Meadow 32283 through 86.</p> <p>17 It's an email chain that you're in the middle of</p> <p>18 on the second page.</p> <p>19 If you can tell me if you recognize this</p> <p>20 document 97 or any part of it and what it</p> <p>21 concerns.</p> <p>22 A (Reviewing.)</p> <p>23 I can't say for certain. I don't recall</p> <p>24 this specifically, but it appears to be where</p> <p>25 they were testing some additional screws or some</p>

<p style="text-align: right;">Page 194</p> <p>1 potential new screws to add to the product line.</p> <p>2 MR. DEUTSCH: Okay. Let me take a</p> <p>3 five-minute break.</p> <p>4 (A recess was taken from 2:39 p.m. to</p> <p>5 2:48 p.m.)</p> <p>6 (Exhibit No. 98 was marked for</p> <p>7 identification.)</p> <p>8 BY MR. DEUTSCH:</p> <p>9 Q Why don't you take a look at what we've marked</p> <p>10 as Meadow 98, which on the front page says "651</p> <p>11 PEXc Reformulation Tollgate 1." It encompasses</p> <p>12 Bates numbers 15266 through 15282.</p> <p>13 If you could take a look at this and tell</p> <p>14 me if you recognize this document; and if so,</p> <p>15 what it is.</p> <p>16 A (Reviewing.)</p> <p>17 I don't remember the document specifically.</p> <p>18 Q Were you involved in developing Tollgate 1</p> <p>19 information for the PEXc reformulation?</p> <p>20 A Yes, I would have been.</p> <p>21 Q Okay. But you don't remember this specific</p> <p>22 document?</p> <p>23 A I don't remember the specific document.</p> <p>24 Q Okay. Do you remember making any presentation</p> <p>25 regarding Tollgate 1 for PEXc reformulation?</p>	<p style="text-align: right;">Page 196</p> <p>1 A Well, I'm not going to say that it couldn't be.</p> <p>2 Q Okay. Were there circumstances where it could</p> <p>3 have been used for the new reformulation</p> <p>4 product?</p> <p>5 A I'm sure that it could have been developed into</p> <p>6 a higher classification, the resin itself.</p> <p>7 However, right, there's a reason that we didn't</p> <p>8 want to go with that was because we wanted to</p> <p>9 utilize a more commercially available pipe resin</p> <p>10 and not be the only -- not -- for commercial</p> <p>11 reasons, not be the only purchaser of a</p> <p>12 particular resin.</p> <p>13 Q Anybody ever explain to you why they selected</p> <p>14 CD 4300 as the resin which, I understand, goes</p> <p>15 back to the period of CPI?</p> <p>16 A I have no idea about that.</p> <p>17 Q And the resin that you currently buy from Dow is</p> <p>18 one that other businesses purchase as well?</p> <p>19 A It's a commercially available pipe grade -- or</p> <p>20 pipe grade resin, so --</p> <p>21 Q And can you buy it from other suppliers or just</p> <p>22 from Dow?</p> <p>23 A It's a Dow material, so you buy it from Dow.</p> <p>24 But they sell it to multiple manufacturers, not</p> <p>25 just us.</p>
<p style="text-align: right;">Page 195</p> <p>1 A We would have presented it at the NPC meeting.</p> <p>2 Q And Tollgate 1 specifies what?</p> <p>3 A Tollgate 1 is -- it's just an arbitrary point in</p> <p>4 the product development, typically associated</p> <p>5 with concept development.</p> <p>6 Q Okay. So in other words, once the concept is</p> <p>7 developed, you say I'm at Tollgate 1 and you</p> <p>8 present it to the committee for approval?</p> <p>9 A Sure.</p> <p>10 Q Okay. So that's where -- with this is at this</p> <p>11 stage. I'm sorry, Meadow 98?</p> <p>12 A Tollgate 1, you know, if -- I don't remember it</p> <p>13 specifically, but this being the Tollgate</p> <p>14 document, but it would have been presented at</p> <p>15 Tollgate 1.</p> <p>16 Q Okay. And on page 15275 you have a page there</p> <p>17 that reads, "Issues and Risk Summary," and</p> <p>18 within that it says, "NIBCO is currently only</p> <p>19 customer of CD 4300 resin."</p> <p>20 Do you know why that was, why NIBCO was the</p> <p>21 only buyer of that product from Total?</p> <p>22 A I don't know specifically, no.</p> <p>23 Q And why -- that resin could not be used for the</p> <p>24 next generation of the product, right, the one</p> <p>25 with 3 that you were trying to achieve?</p>	<p style="text-align: right;">Page 197</p> <p>1 Q Multiple manufacturers of PEXc product?</p> <p>2 A Multiple manufacturers of tubing and piping.</p> <p>3 (Exhibit No. 99 was marked for</p> <p>4 identification.)</p> <p>5 BY MR. DEUTSCH:</p> <p>6 Q Okay. I would like you to take a look at what</p> <p>7 we've marked as Meadow 99. It encompasses Bates</p> <p>8 numbers NIBCO Meadow 134259 through 134286.</p> <p>9 It's a document on the cover page reads "651</p> <p>10 PEXc Reformulation Tollgate 3." It's dated</p> <p>11 May 7th, 2012.</p> <p>12 Do you recognize this document?</p> <p>13 A (Reviewing.)</p> <p>14 I don't recognize this specific document.</p> <p>15 Q Okay. But this concerns the reformulation</p> <p>16 project that you were working on, right?</p> <p>17 A It appears to be associated with a reformulation</p> <p>18 project.</p> <p>19 Q And Tollgate 3 means what here?</p> <p>20 A In typical terms, Tollgate 3 means that we're</p> <p>21 through the design portion of a product</p> <p>22 development and that we're wanting to move</p> <p>23 forward with production tooling of that process</p> <p>24 for full production.</p> <p>25 Q Okay. So this will be a presentation to the new</p>

<p style="text-align: right;">Page 198</p> <p>1 product committee?</p> <p>2 A Yes. It would have been a presentation to them.</p> <p>3 Q And it would be your expectation you were at the</p> <p>4 new product committee meeting when this was</p> <p>5 presented?</p> <p>6 A I would have been.</p> <p>7 Q And you would be at those meetings for any time</p> <p>8 the issue of the PEXc development was presented,</p> <p>9 right?</p> <p>10 A Well, not necessarily, right, because, I mean,</p> <p>11 if I was out of the office or something like</p> <p>12 that, there may have been someone else provided</p> <p>13 the update.</p> <p>14 Q Now, you indicated that you changed jobs at the</p> <p>15 end of 2011, but this is dated May 7th, 2012,</p> <p>16 so you -- even though you had changed your</p> <p>17 position, you were still actively involved with</p> <p>18 the PEXc reformulation?</p> <p>19 A Yes.</p> <p>20 Q And you stayed with it through the completion of</p> <p>21 the project?</p> <p>22 A Correct.</p> <p>23 Q Now, on page 134264, that page is entitled "Is</p> <p>24 Marketing and Sales Prepared to Launch and</p> <p>25 Support," and then it has a bullet point that</p>	<p style="text-align: right;">Page 200</p> <p>1 A I'm not sure on that.</p> <p>2 Q So, in other words, NIBCO needed to sell out</p> <p>3 whatever 1006 inventory it had while it's</p> <p>4 converting to the 3308?</p> <p>5 A Yes. It was going to be, yeah, a running change</p> <p>6 to that -- to those product lines.</p> <p>7 Q And in addition -- strike that.</p> <p>8 Did NIBCO have any process where they sort</p> <p>9 of kept track of what the inventory held by its</p> <p>10 distributors was? Say of its 1006 product?</p> <p>11 A I'm not certain on that.</p> <p>12 (Exhibit No. 100 was marked for</p> <p>13 identification.)</p> <p>14 BY MR. DEUTSCH:</p> <p>15 Q If you could take a look at what we've marked as</p> <p>16 Meadow 100, which is an email chain that you're</p> <p>17 copied at the top on an email from</p> <p>18 Randy Doering to you. It's entitled "Tollgate 5</p> <p>19 for the PEXc Formulation Project." It's dated</p> <p>20 March 21, 2013. It encompasses Bates numbers</p> <p>21 NIBCO Meadow 134651 through 653.</p> <p>22 Do you recognize this document?</p> <p>23 A (Reviewing.)</p> <p>24 Not off the top of my head, no.</p> <p>25 Q And Tollgate 5 refers to what?</p>
<p style="text-align: right;">Page 199</p> <p>1 says, "Quiet launch plan due to the rolling</p> <p>2 change." Then it says, "Minimize external</p> <p>3 strife due to potential mix shipments of</p> <p>4 product."</p> <p>5 Could you explain what that's explaining to</p> <p>6 the new product committee?</p> <p>7 A Yes, I can explain that.</p> <p>8 Q Okay. And what is that?</p> <p>9 A It basically means that as the product was being</p> <p>10 rolled out, instead of having a -- at the</p> <p>11 beginning of the product introduction, it was</p> <p>12 going to be done at the end of a product</p> <p>13 introduction, right; meaning, that there would</p> <p>14 be a running change from the old product to the</p> <p>15 new product.</p> <p>16 The reason for that being is that typically</p> <p>17 when we -- when people introduce new products,</p> <p>18 any existing inventory of old product, you know,</p> <p>19 people seem to tend to want to return that.</p> <p>20 That's not in all limited to -- it's just a</p> <p>21 way of life. It has nothing to do with</p> <p>22 necessarily PEX or anything like that, it's with</p> <p>23 any product introduction.</p> <p>24 Q And do you know how long the 1006 product was</p> <p>25 sold by NIBCO until what time?</p>	<p style="text-align: right;">Page 201</p> <p>1 A Tollgate 5 is after the product has basically</p> <p>2 launched and it has been on the market, and it's</p> <p>3 a set time span after that point in time to go</p> <p>4 back and look at like a lessons learned or</p> <p>5 provide any kind of initial feedback that the</p> <p>6 new product introduction has garnered.</p> <p>7 Q By the way, what's Tollgate 2?</p> <p>8 A Tollgate 2 is design finalization.</p> <p>9 Q And Tollgate 4?</p> <p>10 A Tollgate 4 is market launch.</p> <p>11 Q Now, in this email that Randy Doering sends to</p> <p>12 you he says, "The reformulation was necessary</p> <p>13 and had to be done. We learned about PEXc in</p> <p>14 our process. My only regret is we did not make</p> <p>15 getting a 5 on chlorine a goal, given what we</p> <p>16 know today."</p> <p>17 And what's your understanding of why he's</p> <p>18 saying that to you?</p> <p>19 A My understanding is because the market leader</p> <p>20 was Uponar, and they had a 1006 product at the</p> <p>21 time that we started the reformulation project,</p> <p>22 and in between -- or while our project was going</p> <p>23 on, they developed a 5 series, and so they are</p> <p>24 now the market leader. And then we were, again,</p> <p>25 kind of -- only had the 3 level series product.</p>

<p style="text-align: right;">Page 202</p> <p>1 Q And they sold what, PEXb?</p> <p>2 A No. Uponar sells PEXa.</p> <p>3 Q PEXa. Was that reconsidered by NIBCO of</p> <p>4 possibly making PEXa rather than b and c?</p> <p>5 A No. I mean, there had been conversations about</p> <p>6 it, but it's always been not considered to be</p> <p>7 the right way to go.</p> <p>8 Q And why is that?</p> <p>9 A Well, PEXa is a peroxide-cured chemical reaction</p> <p>10 that is looked at quite ominously, right, from</p> <p>11 that standpoint.</p> <p>12 Q And that's because of environmental concerns?</p> <p>13 A Just in general, it was a slower process, it's a</p> <p>14 slower extrusion process, it has the chemicals.</p> <p>15 That's always looked at as a negative from that</p> <p>16 standpoint.</p> <p>17 Q Well, even though it's a negative view from that</p> <p>18 standpoint, what gives Uponar the advantage in</p> <p>19 the marketplace that it's the number one seller?</p> <p>20 A They were first and they're zealots.</p> <p>21 (Exhibit No. 101 was marked for</p> <p>22 identification.)</p> <p>23 BY MR. DEUTSCH:</p> <p>24 Q Okay. If you can take a look at what we've</p> <p>25 marked as Meadow 101, which is a document on the</p>	<p style="text-align: right;">Page 204</p> <p>1 all contributed what at this point.</p> <p>2 Q Okay. Because in this slide it appears to be</p> <p>3 attributing it to the new resin.</p> <p>4 A Well, no -- well, I mean, no, I think it's a</p> <p>5 combination of we also developed new extrusion</p> <p>6 screws specifically for the product that we</p> <p>7 were -- the new reformulation product.</p> <p>8 Q Now, when it refers to dimples here on the same</p> <p>9 page, what is that?</p> <p>10 A I believe a dimple is a slight depression in the</p> <p>11 outside of the tubing.</p> <p>12 Q Now, in this -- again, in "Supply and Quality"</p> <p>13 it says here, "Dimples appeared to have dropped</p> <p>14 significantly with the addition of surfactant."</p> <p>15 And what is that referring to?</p> <p>16 A A surfactant is something that's used to break</p> <p>17 up the surface tension of water.</p> <p>18 Q Okay. Now, you mention that -- I think you</p> <p>19 ascribe some of the improvement in the product</p> <p>20 to new extrusion screws; is that fair?</p> <p>21 A Yes.</p> <p>22 Q Okay. And could you explain how that works?</p> <p>23 What's the effect of new extrusion screws?</p> <p>24 A Well, I mean, like I said, you know, we</p> <p>25 purchased new extrusion screws that were</p>
<p style="text-align: right;">Page 203</p> <p>1 face that says, "651 PEXc Reformulation.</p> <p>2 Tollgate 5." It's dated March 28th, 2013, and</p> <p>3 encompasses Bates numbers NIBCO 20865 through</p> <p>4 20874.</p> <p>5 Tell me if you recognize this document.</p> <p>6 A (Reviewing.)</p> <p>7 I don't remember this specific document.</p> <p>8 Q Do you remember attending the Tollgate 5</p> <p>9 meeting?</p> <p>10 A I don't remember this specific meeting.</p> <p>11 Q Now, on page 20872 of this Meadow 101, it</p> <p>12 says -- the topic is "Supply and Quality," and</p> <p>13 it says, "No pinholes since converting to the</p> <p>14 new resin."</p> <p>15 So, in essence, this is -- you've succeeded</p> <p>16 in making a better product at this point, right?</p> <p>17 A Well, it's a different product.</p> <p>18 Q Okay. But isn't that an improvement, that it</p> <p>19 doesn't have pinholes?</p> <p>20 A Well, I think it's a reflection on the quality</p> <p>21 control checks.</p> <p>22 Q You mean you ascribe that to quality control</p> <p>23 improvement rather than the change in resin?</p> <p>24 A Well, I mean -- no, I think it's a combination</p> <p>25 of things, of which I'm not exactly sure what</p>	<p style="text-align: right;">Page 205</p> <p>1 developed specifically for our combination of</p> <p>2 resin, master batch, and extrusion speeds.</p> <p>3 Q I just want to make sure I understand a concept</p> <p>4 here. You can have a product that meets</p> <p>5 certification standards but that product could</p> <p>6 still have a defect, right?</p> <p>7 A I'm not certain if I'm following what you're</p> <p>8 saying.</p> <p>9 Q Okay. I know sometimes in the testimony today,</p> <p>10 you know, you've pointed out that the product</p> <p>11 maintains certification or it satisfied one of</p> <p>12 the agency's certification standards.</p> <p>13 That's not a guarantee that the product is</p> <p>14 defect-free, right?</p> <p>15 A You know, I'm not exactly sure how the warranty</p> <p>16 is written relative to that.</p> <p>17 Q Okay. I think I'm asking a simpler question,</p> <p>18 which is just -- I mean, meeting a certification</p> <p>19 standard means that you probably put the product</p> <p>20 out into the marketplace, but that's not a</p> <p>21 guarantee that the product doesn't have some</p> <p>22 inherent defect in it, right?</p> <p>23 A Well, I wouldn't use the word "inherent." I</p> <p>24 mean, that's what the standard is out there to</p> <p>25 be able to do so that if it is, you know,</p>

<p style="text-align: right;">Page 206</p> <p>1 something that is inherently wrong with the</p> <p>2 product, that the standard should -- it's there</p> <p>3 to govern.</p> <p>4 Q Okay.</p> <p>5 A I'm not going to say that, you know, that the</p> <p>6 standard doesn't guarantee that something can be</p> <p>7 manufacturing defect-free. I mean, those type</p> <p>8 of things can occur, right, but that's what the</p> <p>9 checks at the manufacturing locations are for.</p> <p>10 Q And similarly, when somebody sends in a product</p> <p>11 that they say is not working properly that's</p> <p>12 cataloged in your PER system, it's certainly</p> <p>13 possible that there was something wrong with the</p> <p>14 product that was sold, right?</p> <p>15 A Well, it depends, right. It's possible that it</p> <p>16 could be a lot of things.</p> <p>17 Q Right. I think I'm really just trying to</p> <p>18 confirm that even with the certification, the</p> <p>19 product still could have some problem when it</p> <p>20 gets sold to the marketplace?</p> <p>21 A It shouldn't be. Not by design.</p> <p>22 Q Well, a certification is to address certain</p> <p>23 known issues in the industry, right?</p> <p>24 A I believe that if you asked anybody associated</p> <p>25 with the standards organizations, they would</p>	<p style="text-align: right;">Page 208</p> <p>1 It appears to be a November 2008 organizational</p> <p>2 chart of NIBCO.</p> <p>3 Apparently from what you've testified, this</p> <p>4 is shortly after you joined NIBCO, right?</p> <p>5 A I'm assuming, based upon the date on it.</p> <p>6 Q Yes. And you seem to be, on page 4, under</p> <p>7 "Program Managers."</p> <p>8 A Yes.</p> <p>9 Q So does this seem to be an accurate depiction</p> <p>10 of, you know, where you fit in the organization</p> <p>11 and who you reported to?</p> <p>12 A Yes.</p> <p>13 (Exhibit No. 103 was marked for</p> <p>14 identification.)</p> <p>15 BY MR. DEUTSCH:</p> <p>16 Q Okay. And now I'm showing you what's been</p> <p>17 marked as Meadow 103, which is an organizational</p> <p>18 chart which appears to be from April 2009. It</p> <p>19 encompasses Bates numbers NIBCO Meadow 123035</p> <p>20 through 038, and you appear to be on the last</p> <p>21 page of this document as Manager, Program</p> <p>22 Management Office.</p> <p>23 Is this an accurate depiction of your role</p> <p>24 as of April 2009?</p> <p>25 A No, not really.</p>
<p style="text-align: right;">Page 207</p> <p>1 tell you that the standards are there for the</p> <p>2 health, welfare, and safety of the end user and</p> <p>3 consumer.</p> <p>4 Q Have you ever sat on any of these standards</p> <p>5 committees?</p> <p>6 A Not personally, no.</p> <p>7 Q Okay. Do you know if on the standards</p> <p>8 committees there's participants who have no</p> <p>9 connection with the industry itself?</p> <p>10 A I believe that the committees, depending upon</p> <p>11 the organization -- because there's a lot of</p> <p>12 different committees and organizations out there</p> <p>13 that write and govern standards -- that they all</p> <p>14 have their own policies regarding the number of</p> <p>15 manufacturers that can be associated with any</p> <p>16 individual product standard.</p> <p>17 (Exhibit No. 102 was marked for</p> <p>18 identification.)</p> <p>19 BY MR. DEUTSCH:</p> <p>20 Q All right. I want you to take a look at 102. I</p> <p>21 was going to show you a series of organizational</p> <p>22 charts just to make sure I understand your</p> <p>23 position within the organization over time.</p> <p>24 So on this one, which is Meadow 102, it</p> <p>25 encompasses NIBCO Meadow 123104 through 123108.</p>	<p style="text-align: right;">Page 209</p> <p>1 Q Okay. Then what's wrong here?</p> <p>2 A Well, I was promoted to manager and then within</p> <p>3 a week they changed the title to director.</p> <p>4 Q All right.</p> <p>5 A So --</p> <p>6 Q That must have been a good week. You had a good</p> <p>7 high performance for that week.</p> <p>8 And at that point in time did you have</p> <p>9 people reporting to you? Because in this chart</p> <p>10 it doesn't show that.</p> <p>11 A Yes, I did, because the problem is this is</p> <p>12 really more the engineering side. It's just not</p> <p>13 showing the program managers. They're</p> <p>14 actually -- I'm not sure why it's shown off over</p> <p>15 there like that. I think that's a mistake.</p> <p>16 (Exhibit No. 104 was marked for</p> <p>17 identification.)</p> <p>18 BY MR. DEUTSCH:</p> <p>19 Q Okay. Now I'd like you to take a look at what</p> <p>20 we've marked as Meadow Exhibit 104. It's</p> <p>21 another organizational chart. This one appears</p> <p>22 to be from June 2009. It encompasses Bates</p> <p>23 numbers NIBCO Meadow 123086 through 123089, and</p> <p>24 you appear to be on the final page, in</p> <p>25 engineering, listed as Director of Program</p>

<p style="text-align: right;">Page 210</p> <p>1 Management.</p> <p>2 Does this accurately depict your role in</p> <p>3 the organization of June 2009?</p> <p>4 A I believe so.</p> <p>5 Q Now, was this also kind of a reorganization of</p> <p>6 NIBCO that was occurring at this point?</p> <p>7 A I don't know what you mean by that.</p> <p>8 Q In other words, like, the layout of who reports</p> <p>9 under whom seems to have shifted. So you</p> <p>10 have -- you're in your own wing here it appears?</p> <p>11 A The program management office was separated from</p> <p>12 within engineering and as its own stand-alone</p> <p>13 function.</p> <p>14 Q Okay. And that's because it focused on new</p> <p>15 projects?</p> <p>16 A No. We were focused on projects, some of which</p> <p>17 were new products. The vision was that it could</p> <p>18 serve any project.</p> <p>19 (Exhibit No. 105 was marked for</p> <p>20 identification.)</p> <p>21 BY MR. DEUTSCH:</p> <p>22 Q If you can take a look at what we've now marked</p> <p>23 Meadow 105, which now appears to be an</p> <p>24 organizational chart of January 2012. It</p> <p>25 encompasses NIBCO Meadow 123073 through 123077.</p>	<p style="text-align: right;">Page 212</p> <p>1 computer or did somebody search on a server to</p> <p>2 collect your records?</p> <p>3 A I believe we searched for things at least</p> <p>4 initially, right. We were asked to do it on an</p> <p>5 individual basis, and I believe we did that, and</p> <p>6 we also looked for any and all engineering</p> <p>7 documents that we might have associated with the</p> <p>8 product lines.</p> <p>9 Q And was that just you personally or you --</p> <p>10 everybody that reported to you?</p> <p>11 A I don't remember the specifics of that.</p> <p>12 Q You mean you remember that you were asked to</p> <p>13 reserve things but you're not familiar with who</p> <p>14 else may have been asked?</p> <p>15 A I'm not certain who all was asked.</p> <p>16 Q Is there any kind of central depository of</p> <p>17 NIBCO's records that everybody can access and</p> <p>18 share?</p> <p>19 A I mean, you'll have to be more specific than</p> <p>20 that, right. Each function has their own</p> <p>21 document retention requirements.</p> <p>22 Q Ah. So like in engineering, I don't know, is</p> <p>23 there a master database that everybody in</p> <p>24 engineering could access?</p> <p>25 A For engineering, drawings, specifications, and</p>
<p style="text-align: right;">Page 211</p> <p>1 You appear to be in the first page as</p> <p>2 Director of Product Engineering. Does this seem</p> <p>3 to be an accurate depiction of your role in the</p> <p>4 organization at this point in time?</p> <p>5 A I believe so, except that you said Director of</p> <p>6 Product Engineering. It's really just like</p> <p>7 Director, comma, Product Engineering.</p> <p>8 Q You're absolutely right. Okay.</p> <p>9 And again, is this also a reorganization of</p> <p>10 engineering, that the boxes have been moved</p> <p>11 around as well, not just you having a new title?</p> <p>12 A No. They asked me to take over project</p> <p>13 engineering from the program management group.</p> <p>14 Q Now, in your role related to this litigation,</p> <p>15 did you have to locate or reserve any materials</p> <p>16 that you had in your possession?</p> <p>17 A I mean, I was asked to provide any and all</p> <p>18 documents that we have, right, so I believe</p> <p>19 that's what was asked.</p> <p>20 Q I'm sorry, specifically what were you asked to</p> <p>21 produce or reserve?</p> <p>22 A I believe it was anything associated with our</p> <p>23 PEX products. I'm not -- I mean, I don't</p> <p>24 remember specifically.</p> <p>25 Q Okay. Now, did you have to go search in your</p>	<p style="text-align: right;">Page 213</p> <p>1 models, yes, and then also for any internal</p> <p>2 testing, yes.</p> <p>3 Q And is there a -- could somebody centrally</p> <p>4 search for everybody's emails?</p> <p>5 A I'm not certain about that. That's probably a</p> <p>6 better question for IS.</p> <p>7 Q Did you -- do you know if you did a specific</p> <p>8 search for this case, the Meadow case?</p> <p>9 A I don't remember specifically.</p> <p>10 Q Okay. How about -- do you know if you did any</p> <p>11 searches in regards to other PEX product cases</p> <p>12 that NIBCO has been sued on?</p> <p>13 A I don't remember the specifics, so, you know.</p> <p>14 MR. DEUTSCH: All right. Why don't we take</p> <p>15 a five-minute break. I just want to see if we</p> <p>16 can wrap up.</p> <p>17 MR. BRADSHAW: Sure.</p> <p>18 (A recess was taken from 3:22 p.m. to</p> <p>19 3:27 p.m.)</p> <p>20 MR. DEUTSCH: I don't have any further</p> <p>21 questions at this time.</p> <p>22 MR. SHAMBERG: I just have a couple.</p> <p>23</p> <p>24</p> <p>25</p>

<p style="text-align: right;">Page 214</p> <p>1 CROSS-EXAMINATION</p> <p>2 QUESTIONS BY MR. KYLE A. SHAMBERG:</p> <p>3 Q Good afternoon, Mr. Bobo, my name is</p> <p>4 Kyle Shamberg, I represent the plaintiffs in the</p> <p>5 Cole versus NIBCO matter.</p> <p>6 Just a couple questions, much shorter than</p> <p>7 Mr. Deutsch.</p> <p>8 Earlier we were discussing some testing</p> <p>9 that NSF was performing on NIBCO's half-inch</p> <p>10 blue PEXc tubing in late 2009.</p> <p>11 Do you recall that?</p> <p>12 A Uh-huh.</p> <p>13 Q And I believe you testified at that time that</p> <p>14 NIBCO had that PEXc 1006 tubing certified by</p> <p>15 IAPMO; is that correct?</p> <p>16 A At the same time, yes.</p> <p>17 Q So if NIBCO already had the certification by</p> <p>18 IAPMO, why was NIBCO also continuing to pursue</p> <p>19 certification with NSF?</p> <p>20 A Well, I don't recall specifically. I believe it</p> <p>21 was just to have the most flexibility possible.</p> <p>22 Q Okay. Why would there be more flexibility</p> <p>23 having two listings?</p> <p>24 A Well, from the aspect of you have the</p> <p>25 certification -- or you have the standard and</p>	<p style="text-align: right;">Page 216</p> <p>1 A We pay for each agency independently.</p> <p>2 Q And I believe you also gave some testimony with</p> <p>3 respect to Jana. I don't want to</p> <p>4 mischaracterize what you said, but I believe you</p> <p>5 said that Jana, at least at the time of this</p> <p>6 reformulation project, didn't trust NSF; is that</p> <p>7 fair?</p> <p>8 A That's my perception looking back at it now.</p> <p>9 Q During that same period of time, did NIBCO trust</p> <p>10 NSF?</p> <p>11 A I don't know that we didn't have a reason not to</p> <p>12 trust NSF. We work with NSF on a lot of</p> <p>13 different products.</p> <p>14 Q Subsequent to that time, so through today --</p> <p>15 A Continue to work with them.</p> <p>16 Q -- do you have any reason to not trust NSF? Or</p> <p>17 does NIBCO have any reason not to trust NSF?</p> <p>18 A Not that I'm aware of.</p> <p>19 MR. SHAMBERG: Okay. That's all the</p> <p>20 questions I have.</p> <p>21 MR. BRADSHAW: No questions.</p> <p>22 Read and sign.</p> <p>23</p> <p>(Time noted 3:30 p.m.)</p> <p>24</p> <p>25 AND FURTHER THE DEPONENT SAITH NOT.</p>
<p style="text-align: right;">Page 215</p> <p>1 then you have the agency and then you have how</p> <p>2 the agency -- the agency's policy regarding the</p> <p>3 standard.</p> <p>4 Q Do you happen to know how the policies differ</p> <p>5 between NSF and IAPMO for the relevant standard</p> <p>6 or standards?</p> <p>7 A Not necessarily off the top of my head, no.</p> <p>8 Q Does it also give you some cushion, you know, if</p> <p>9 you happen to lose one of the listings, you</p> <p>10 still have the backup listing?</p> <p>11 A I think it was more in terms of if one of the</p> <p>12 agencies had a more unfavorable cost structure</p> <p>13 or more unfavorable policy relative to that as</p> <p>14 far as then, you know, you would go with the</p> <p>15 certification body that provides you the best</p> <p>16 value.</p> <p>17 Q Okay. Did NIBCO ultimately obtain that</p> <p>18 certification from NSF?</p> <p>19 A The product was recertified, yes.</p> <p>20 Q Okay. So there was a period in time after late</p> <p>21 2009 when the 1006 tubing was listed with both</p> <p>22 IAPMO and NSF concurrently?</p> <p>23 A Correct.</p> <p>24 Q And that costs more to NIBCO than just having it</p> <p>25 listed with one agency, correct?</p>	<p style="text-align: right;">Page 218</p> <p>1 STATE OF INDIANA)</p> <p style="text-align: center;">) SS:</p> <p>2 COUNTY OF LAKE)</p> <p>3</p> <p>4 I, Richard D. Ehrlich, Notary Public in and</p> <p>5 for the County of Lake, State of Indiana, at</p> <p>6 large, do hereby certify that DAVID BOBO, the</p> <p>7 deponent herein, was by me first duly sworn to</p> <p>8 tell the truth, the whole truth and nothing but</p> <p>9 the truth in the aforementioned matter;</p> <p>10 That the foregoing deposition was taken on</p> <p>11 behalf of the Plaintiffs, at the Hilton Garden Inn</p> <p>12 Elkhart, 3401 Plaza Court, Elkhart, Indiana, on</p> <p>13 the 1st day of February, 2017, at 9:00 a.m.</p> <p>14 pursuant to the Federal Rules of Trial Procedure;</p> <p>15 That said deposition was taken down in</p> <p>16 stenograph notes and translated into an English</p> <p>17 transcript under my direction, and that said</p> <p>18 transcript is a true record of the testimony given</p> <p>19 by the said deponent; and that signature was</p> <p>20 reserved by the Defendant;</p> <p>21 That the parties were represented by their</p> <p>22 counsel as aforementioned.</p> <p>23 I do further certify that I am a</p> <p>24 disinterested person in this cause of action, that</p> <p>25 I am not a relative or attorney of either party or</p>

<p style="text-align: right;">Page 219</p> <p>1 otherwise interested in the event of this action, 2 and that I am not in the employ of the attorneys 3 for any party. 4 IN WITNESS WHEREOF, I have hereunto set my 5 hand and affixed my notarial seal on this 15th day 6 of February, 2017. 7 8 9 NOTARY PUBLIC 10 11 My Commission Expires: 12 November 22, 2024 13 County of Residence: 14 Lake County 15 16 17 18 19 20 21 22 23 24 25</p>	<p style="text-align: right;">Page 221</p> <p>1 Meadow v. NIBCO 2 David Bobo 3 E R R A T A 4 ----- 5 PAGE LINE CHANGE 6 ----- 7 Reason: _____ 8 ----- 9 Reason: _____ 10 ----- 11 Reason: _____ 12 ----- 13 Reason: _____ 14 ----- 15 Reason: _____ 16 ----- 17 Reason: _____ 18 ----- 19 Reason: _____ 20 ----- 21 Reason: _____ 22 ----- 23 Reason: _____ 24 ----- 25 2526857</p>
<p style="text-align: right;">Page 220</p> <p>1 Meadow v. NIBCO 2 David Bobo 3 INSTRUCTIONS TO THE WITNESS 4 Please read your deposition over 5 carefully and make any necessary corrections. 6 You should state the reason in the 7 appropriate space on the errata sheet for any 8 corrections that are made. 9 After doing so, please sign the errata 10 sheet and date it. 11 You are signing same subject to the 12 changes you have noted on the errata sheet, 13 which will be attached to your deposition. 14 It is imperative that you return the 15 original errata sheet to the deposing 16 attorney within thirty (30) days of receipt 17 of the deposition transcript by you. If you 18 fail to do so, the deposition transcript may 19 be deemed to be accurate and may be used in 20 court. 21 22 23 24 25 2526857</p>	<p style="text-align: right;">Page 222</p> <p>1 Meadow v. NIBCO 2 David Bobo 3 ACKNOWLEDGMENT OF DEPONENT 4 I, _____, do 5 hereby certify that I have read the foregoing 6 pages and that the same is a correct 7 transcription of the answers given by 8 me to the questions therein propounded, 9 except for the corrections or changes in form 10 or substance, if any, noted in the attached 11 Errata Sheet. 12 13 _____ 14 DATE SIGNATURE 15 16 Subscribed and sworn to before me this 17 _____ day of _____, 20__. 18 19 My commission expires: _____ 20 _____ 21 Notary Public 22 23 24 25 2526857</p>

[& - 1:32]

Page 1

&	103 3:23 208:13,17	133943 76:17 77:8	15413 98:5
& 2:8,14 8:24 9:1 9:17,21,24 10:10 10:16 11:1,22 12:3,8 13:2,9	104 3:24 209:16,20 105 3:24 210:19,23 1065 129:20 1068 129:20 11/8/09 3:13 119 3:8 11:14 116:2 12 57:8,21 100:25 135:14 168:5 177:21 12/1/10 3:17 123035 208:19 123073 210:25 123077 210:25 123086 209:23 123089 209:23 123104 207:25 123108 207:25 126 3:9 129 3:10 12:09 116:3 13-7871 1:2 13359 79:23 133858 41:18 133865 43:8 133877 46:9 133892 48:24 133895 50:17,24 54:24 133896 57:2 64:19 133899 58:1 133905 60:9 65:25 133906 67:18 133920 68:12 133921 68:14 133923 71:7,11 133927 71:22 133928 72:11 133937 74:22	133952 78:18 133957 78:2,13 133959 79:23 133965 80:1 133966 81:4 133968 82:25 134027 85:6,10 134103 88:7 134121 41:18 134124 164:3 134127 165:2 134131 164:3 134136 164:20 134140 119:22 134145 119:22 134189 148:12 134191 149:9 134193 148:12 134202 157:11 134259 197:8 134264 198:23 134286 197:8 134608 146:4 134609 146:5 134651 200:21 134660 100:8 135 3:11 135930 191:13 135934 191:13 14 57:8,15 110:13 172:17 176:15 183:11 191:14 140 3:11 145 3:12 148 3:13 15266 194:12 15275 195:16 15282 194:12 15405 91:20	15416 98:23 15423 91:21 154307 93:9 157 3:14 158 3:14 15th 219:5 16 177:11 16181 170:19 16182 172:12 161863 176:8 1619 177:10 16191 177:12 16201 178:14 16202 178:16 16205 180:22 1622 2:9 163 3:15 16505 182:17,21 16509 170:20 16630 126:23 170 3:16 17th 124:2 149:3 153:2 155:8 18 85:17 177:21 1800 2:20 1801 2:20 184 3:17 188 3:18 191 3:18 19103 2:20 19103-6305 2:9 192 149:9 193 3:19 194 3:19 197 3:20 1995 9:7 1997 9:9,19 1:23 156:24 1:32 156:25
0	0 22:21 038 208:20 07-2169 172:24 08-1136 41:20 08-3777 172:25 09-1159 3:16 170:16		
1	1 3:20 104:13 107:1 162:9,10 180:20 182:8 194:11,18,25 195:2,3,7,12,15 10 116:24,25 10/8/09 3:12 100 3:8,21 64:8 152:17 155:6 162:16 169:4 179:15 200:12,16 1006 37:8,12,17 45:14 46:20 47:21 50:2 70:22 73:16 73:19 80:11,15,17 81:13 83:9 85:1 85:23 86:23 118:19 133:6 178:9 181:8 199:24 200:3,10 201:20 214:14 215:21 101 3:22 202:21,25 203:11 102 3:23 207:17,20 207:24		

[1st - 61]

Page 2

1st 218:13	186:11	261 46:10 48:24	35th 48:24
2	2011 20:8 21:21	50:17 60:11	38th 50:17
2 51:12,21,25	28:24 29:12 34:14	27 157:9	3:22 213:18
131:5 164:20	34:22 48:20	27651 188:16	3:27 213:19
176:8 201:7,8	100:24 198:15	27652 188:16	3:30 216:23
2.0. 180:24	2012 37:1,12 164:6	2774 158:24	4
20 46:10 222:17	166:7 197:11	2778 161:9	4 3:2 201:9,10
200 3:21 192:20	198:15 210:24	2779 162:12	208:6
2001 85:16	2013 190:7 191:15	2780 158:25	40 30:19 102:15,17
2004 9:22 12:11	200:20 203:2	28 85:17 89:20	103:4 110:24
166:6	2017 1:23 218:13	177:19 178:8	112:9 125:7
2005 12:12 165:6	219:6	28th 203:2	41 3:6 123:24
2008 13:12,16 15:5	202 3:22	29 142:18	125:13 126:11
17:7,24,25 37:1,12	2023 56:14	29th 122:12	42nd 58:2
59:6 104:22 185:7	2024 219:12	2:39 194:4	43 121:9,11
208:1	205 157:11	2:48 194:5	4300 135:12
2009 5:22 6:16	207 3:23	2nd 1:22	195:19 196:14
7:22 20:1,19	208 3:23	3	44 165:7,24 166:11
21:21 24:15 25:6	20865 203:3	3 3:21 28:12,15	166:14
25:14 26:20 27:5	20872 203:11	45:8 47:16 50:3,4	46500 192:18
28:23 46:24 58:5	20874 203:4	50:5 121:14	47 165:7
58:6 83:15,20	209 3:24	127:25 162:9,10	48th 60:10
89:20 90:22,22	20th 147:21	162:11,19,24	5
91:23 92:6 95:21	21 119:24 200:20	180:16 195:25	5 3:22 162:20,24
97:7 99:6 100:24	210 3:24	197:10,19,20	163:1,3,7,9,11,18
102:17 103:20	211 2:4	201:25	163:20 180:16,19
119:25 121:14	214 3:3	30 89:17 102:17	182:7,8 200:18,25
122:12,19 124:2	215.875.3000 2:10	103:20 125:5	201:1,15,23 203:2
126:22 127:5,6,13	21st 185:7	220:16	203:8
127:20 128:14,17	22 219:12	300 85:22	50 93:24 94:5
129:10 131:10	2345 2:15	3006 180:13	109:17 110:3,19
132:6 136:2	24 57:21 85:17	3008 85:24	165:10,13,20,25
137:12 138:24	135:12 177:19	30th 125:7	500 2:5
140:18 142:5,18	178:8	312.750.1265 2:6	5006 180:13,19
146:8 149:3 153:2	24743 184:8	32283 193:16	6
155:9,15 171:18	24745 184:8	329 176:8 180:21	6 57:8 108:5
208:18,24 209:22	25 116:21,22	3308 45:18 86:9,21	125:12,13 157:10
210:3 214:10	144:12,14 157:24	200:4	60606 2:5
215:21	2526857 220:25	3401 1:21 218:12	61 100:9 169:9,12
2010 3:15 157:9,24	221:25 222:25	35 30:19	
158:23 160:2,22			

[641 - agencies]

Page 3

641 126:24 64108 2:15 65 178:12 651 3:19,20,22 194:10 197:9 203:1 653 200:21 68 135:8	88 3:12 145:23 146:3 89 3:13 148:2,6 152:25 155:1,8 8th 140:18 146:7	able 109:1 118:11 143:21 145:4 160:22 162:23 163:11 205:25 absolutely 60:14 106:8 211:8 accept 138:15 162:22 164:21 acceptable 166:12 169:6 178:9 181:17 182:14 accepted 14:20 163:17 accepts 164:21 access 212:17,24 accurate 208:9,23 211:3 220:19 accurately 210:2 achieve 27:24 28:9 162:1,20 163:18 163:20 178:9 195:25 achieved 45:17 65:1 163:7 achieving 163:13 acknowledgment 222:3 acquire 118:3 acquired 117:17 185:17 acquires 117:4 acquisition 38:9 71:19 acronym 134:23 acronyms 46:7 action 1:2 4:9 147:16,22 218:24 219:1 actions 60:5 93:18 138:19	actively 198:17 activity 64:24 actual 23:9 79:15 123:5,14 134:23 add 194:1 added 46:23 addition 57:20 133:4 200:7 204:14 additional 26:3 52:14,20 99:3 142:19 182:23 193:25 additive 98:22 address 56:23 132:9,20,23 181:9 184:18 186:12,20 192:23 206:22 addressed 93:21 160:16 180:4 181:10 adequate 181:3 administrative 140:20 141:6 adopted 38:9 107:24 151:19 advanced 30:11 30:14 61:8 advantage 64:11 169:18,20 202:18 advice 137:21 139:19 140:2 affixed 219:5 aforementioned 218:9,22 afternoon 214:3 agencies 36:22 54:5 57:6 64:21 111:9 114:17,23 145:12 152:6 154:14,17 215:12
7	9		
7 108:16 109:2 126:12 71 135:8 7th 197:11 198:15	9 91:23 136:2,20 90 3:14 76:21 157:1,5 91 3:7,14 158:18 158:22 159:13 161:10 92 3:15 163:22 164:1 169:16 93 3:16 170:11,15 173:16 177:14 182:18 94 3:17 183:25 184:4 186:5 95 3:18 188:11,15 96 3:18 191:8,12 97 3:19 193:11,15 193:20 98 3:19 194:6,10 195:11 98927 140:17 99 3:20 197:3,7 9:00 1:23 218:13 9:30 60:15 9:41 60:16 9th 92:6 95:21 97:7		
8	a		
8 135:14 80 3:6 41:11,15 48:23 54:25 57:3 58:1 60:10 64:18 64:18 67:24 68:11 71:8 72:11 74:18 76:16 79:22,25 84:1 85:6 88:6 124:20 81 3:7 91:15,19 97:12 98:5 128:25 816.292.2000 2:16 82 3:8 100:3,7 102:3,25 103:9,19 83 3:8 119:16,20 119:21 84 3:9 126:16,20 128:21 85 3:10 129:14,18 129:25 131:5 86 3:11 135:21,25 138:8 139:4 193:16 87 3:11 140:12,16 143:19	a.m. 1:23 60:15,16 116:2 218:13 a1 54:25 56:11 a1.1 55:1 abide 182:10 ability 176:14		

[agency - aside]

Page 4

agency 38:21 39:1 49:24 50:8,9 53:9 55:15 106:15 111:22 114:11,25 215:1,2,25 216:1 agency's 205:12 215:2 aggressive 168:10 ago 124:14 148:19 agree 42:23 43:12 58:13 75:9 80:6 81:7,12 83:2 105:4 109:20 129:1 138:14 177:6 181:12 agreement 183:10 ah 212:22 ahead 62:24 143:14 171:13 air 190:20 alabama 9:2 alan 1:4 aleesha 100:16 101:12,18 102:4 103:1 119:24 120:16,18,24 121:24 122:11 136:1,12 137:13 139:5 140:7 148:10 155:2,9 156:14 157:23 158:14 alice 24:9 allocate 61:12 allocation 61:11 allow 142:20 allowed 118:25 alloy 191:25 192:1 192:9,12,14 alloys 184:7 187:6 193:2	alternative 56:13 57:5 64:20 ambient 190:22,22 america 32:6 amount 84:23 86:10 143:17 183:19 analysis 33:5 62:22,23 75:9 79:17 163:10 175:18 179:21 180:25 189:12 192:7 analytical 131:25 anderson 76:4 115:20 116:1 andrew 184:5 190:8 andy 30:25 35:23 36:19 andy's 36:15 annual 45:3 ansi 110:13 answer 5:1,6,9 107:1 112:3,16,18 113:4,16 115:2 118:11 132:22 152:4 191:3 answers 222:7 anticipation 172:19 antioxidant 81:25 antioxidants 69:20 87:10 133:22,25 134:3,7 134:10 antonio 77:21,23 anybody 6:18 7:24 14:5 15:17 18:20 27:11 38:5,8 40:24 41:1 67:1	71:18 89:5,11 92:17,23 95:3,20 104:6 118:13 130:10 140:7 141:18 144:24 152:19 159:10 172:1 174:6 181:24 196:13 206:24 anyway 182:13 ao 81:20 132:1 133:17 apparently 78:20 81:6 130:4,5 133:11 148:21 157:5 162:14 172:5 208:3 appear 192:19 208:20 209:24 211:1 appeared 177:20 204:13 appearing 186:21 appears 58:11 78:15 80:2 83:1 103:18 113:12 119:25 148:7 150:11 164:1 174:18,21 193:24 197:17 204:2 208:1,18 209:21 210:10,23 appendix 179:17 appendixes 178:15 applications 188:5 applied 20:21 106:14 135:20 apply 52:11,16 59:18 106:18	approach 53:17 111:6 140:9 approached 20:12 appropriate 220:7 approval 23:22 97:25 195:8 approvals 23:4,14 approve 22:14 23:9,10 approved 22:12 22:14,20,21 54:7 171:13,15,16,20 approving 62:1,22 approximate 45:3 approximately 135:8,12 142:17 177:21 185:6 april 3:15 9:9,19 20:1,19 21:21 24:15 28:23 119:24 158:23 160:2,22 208:18 208:24 arbitrary 195:3 area 24:13 64:25 66:2 77:21,23 areas 12:5 37:7 77:16 argument 168:24 169:5 argumentative 112:17 113:3 arkansas 8:6,6 arrived 41:9 arriving 173:11 art 24:9 ascribe 203:22 204:19 asia 189:3,6,10 aside 89:15
--	---	--	--

[asked - bates]

Page 5

asked 5:18 6:23 20:11,17 29:15 108:21 206:24 211:12,17,19,20 212:4,12,14,15 asking 7:6 14:25 17:6 28:25 36:23 44:10 51:22 52:3 62:2,10 63:9 70:5 107:19 112:1 117:18 120:17 128:12 132:12,19 149:25 151:1,2,13 152:14 172:7 205:17 aspect 66:9 103:22 147:9 155:24 214:24 aspects 98:18,25 99:8 101:15 102:2 137:16 assembly 11:18 asserting 178:3 assessed 181:5 assets 38:10 71:20 assign 47:24 assigned 22:12 24:16 27:1 50:8 assignment 10:25 48:2 174:8 assist 7:24 32:22 36:20,20 40:14 51:6 assistance 131:24 associated 12:19 14:19 18:2,6 24:19 28:18 110:13 115:4 151:10 156:3 169:12 174:14,17 175:25 187:15	192:21 195:4 197:17 206:24 207:15 211:22 212:7 assume 5:5 90:9 90:12 94:18 136:11 173:12 assuming 208:5 assumption 65:11 assumptions 57:4 57:7 64:22 65:6 112:2 assurance 9:12,25 10:5 astm 55:19,20 56:4,14 57:21,21 110:13,14 125:14 125:18,19,25 131:21 139:12,14 159:19,22 160:16 183:10 atlantic 2:19 attached 220:13 222:10 attachment 103:19 attempting 27:21 161:4 attending 203:8 attention 68:10,14 77:15 78:13 80:1 82:21 attorney 218:25 220:16 attorneys 219:2 attractions 80:15 attributable 93:22 attributing 204:3 audience 92:18 93:7 94:14 128:7	audit 31:16 66:21 auditor 138:18 august 159:25 160:8 authorized 105:17 106:16 authorizing 97:22 availability 54:15 available 87:11 196:9,19 avoid 67:6,12 111:5 112:10 187:3 avoided 139:13 aware 19:19 25:11 26:18 29:25 54:12 56:9 64:2,14 77:18,22 83:8,19 91:10 110:18 115:3 118:8 121:7 130:19 132:8 163:21 166:14 184:18 187:15 190:24 216:18 awhile 110:15	background 8:3 15:18 18:22 75:8 131:13 backup 215:10 bad 33:18 145:13 145:15 ballot 125:17 balloting 56:13 barrier 43:20 44:1 44:3,12 45:21,22 45:23,25,25 base 91:3 107:9 based 56:6 61:25 67:21 68:24 69:2 71:9 75:10 76:23 94:12 95:17,18 107:24 111:4 133:11 144:16 149:12,23 154:22 163:16 175:17 177:19 179:20 208:5 baseline 91:11 basic 53:4 basically 10:9 11:12,23 33:3 53:14 56:24 73:11 106:13,16 113:19 113:23 129:9 135:1 157:20 199:9 201:1 basis 36:7,7 49:12 49:14 52:9 58:22 72:22 106:20 114:10 173:14 174:21 212:5 batch 87:12 205:2 bates 41:18 43:7 46:8 48:23 50:16 60:9 65:25 78:2 82:25 91:20
---	---	--	--

[bates - break]

Page 6

119:21 126:23 129:21 140:17 146:4 148:11 157:10 158:24 164:2 176:8 184:8 188:15 191:12 193:16 194:12 197:7 200:20 203:3 208:19 209:22 beam 3:16 43:24 45:2,4 46:12,15,19 47:2,4,9,17,25 48:7,12 58:3,12,18 58:19 59:10,13,15 59:18,23 60:2,7 68:23 69:1,4,14 70:7 73:3 83:5,16 84:13,16,22 85:15 85:19 86:4,8 135:6,10 161:11 161:13,17,21 170:17 171:10,13 173:15 174:3 175:1,10 176:1,6 178:17,24 179:5 179:11 becoming 166:12 began 7:11 13:15 15:4 25:8 26:22 beginning 7:12 18:8 19:20 24:15 199:11 begins 68:12 79:22 begun 26:20 128:17 behalf 1:7,20 218:11 belgium 179:15 belief 39:19 160:14	believe 4:16 6:5,7 7:11 9:22 10:15 12:12 13:12,16,22 17:13,15,21 18:11 19:4 20:1,7 21:22 24:9 25:15 27:23 28:6,10 30:18 34:11,15 37:16,17 37:21 38:2,11,15 38:19 39:3,8,10,12 39:13,19 40:9 41:23 42:4,7,25 43:5,14,16,18,20 43:21 45:11 46:22 47:1 49:14 51:4 52:7 53:11 54:16 54:21 55:17,19 56:3,16,21,21 59:7 59:7,12 60:4,4,7 63:22 65:15,16,18 65:21,21,24 67:8 68:5 69:19 70:16 73:11 75:12,17,19 75:23,25 76:11 77:20 80:12 83:21 88:5,24 89:2,13,24 90:6 91:14 92:8 92:16 93:16 95:18 96:11,11,22,22 97:16,24 99:7,21 100:19 101:5 102:7 108:3,5,6,16 109:7,10 110:4,14 112:20 113:17,18 114:8,12,15 116:16,22,25 119:5 120:20 122:13 125:11,21 125:25 132:22,25 133:8,14 134:8 135:13 136:9,24	139:21 141:17 142:6 143:20 145:6 153:18 154:20,24 155:16 156:18 160:14 161:2 165:12,19 166:14 167:3 168:5 169:20,23 171:3 174:2 175:4 175:4 176:18 178:20 179:13,14 180:18,18 182:16 187:4,6 189:8 191:4,7,23 192:8 192:11,17 193:1 204:10 206:24 207:10 210:4 211:5,18,22 212:3 212:5 214:13,20 216:2,4 believed 55:20 176:13 benchmarked 180:12 benchmarks 177:17 bend 8:10 80:21 beneficial 56:19 benefit 161:5 benefited 56:24 161:7 berger 2:8 best 16:5 27:2 74:9 85:25 108:19 118:11,16 171:21 215:15 better 59:17 133:1 151:9 158:7 174:3 179:5 203:16 213:6	black 8:24 9:1,17 9:21,24 10:10,16 11:1,22 12:3,8 13:2,9 blue 142:6 147:18 147:25 155:11 156:5,6 214:10 bm.net 2:10,11 board 23:22 24:1 bobo 1:14,17 3:11 3:17 4:1,7 89:21 120:2 148:8,23 157:7 214:3 218:6 220:2 221:2 222:2 body 54:20 112:14 115:16 215:15 boilers 44:23 bottom 45:20 103:11 139:1 175:16 bought 151:19 box 74:23 boxes 211:10 boyd 1:5 bracketed 155:19 bradshaw 2:14 43:10 60:12 85:8 111:25 112:15 113:2,15 114:24 152:2 156:22 177:11 213:17 216:21 brand 32:7 branded 32:25 brass 184:7,14,19 185:14,15 186:4 192:24 break 5:7,10 9:4 10:4 60:13 115:20 116:1 156:22 194:3 204:16
---	---	---	---

[break - chain]

Page 7

213:15 breakdown 78:19 brent 22:3 brian 130:4 briefly 8:3 37:10 bring 111:2 broad 63:10 106:12 broadly 53:23 brought 43:21 82:20 bryce 18:3,11 101:8,24 bulk 181:4 bullet 57:6,19 64:22 65:7 71:12 71:13 72:1,15 73:3,4 75:1 77:1 77:11 81:10,19 83:5 85:14 94:21 95:12 98:16,25 159:21,24 160:6 168:23 179:22,25 198:25 business 16:4,14 16:19,19 24:17 26:10 28:18 40:22 40:23 45:5 54:2 71:20 100:1 151:20,24 189:5 businesses 196:18 buy 84:13,16 186:2,7 196:17,21 196:23 buyer 195:21 buying 50:13 buys 63:23	219:9 call 3:10 30:7 102:6,9,12 103:13 131:6,7,10 136:17 139:20 called 8:22 71:9,25 73:2 78:3 85:13 98:7 104:11 calling 86:5 112:16 118:9 calls 136:15 capital 84:20 card 158:9 cards 139:15 career 8:22 19:20 28:19 carefully 220:5 carolina 8:25 case 4:8,9,15 6:6 6:12 89:18 99:21 102:15,19 121:9 121:11 143:13 146:17 148:6 157:5 167:2 168:7 168:11 213:8,8 cases 33:13 213:11 cast 26:3,3 188:7 casual 73:24 cataloged 206:12 category 73:2 165:4 167:14 caught 111:16 cause 114:21 218:24 cd 135:12 195:19 196:14 ceased 130:21 central 212:16 centrally 213:3 certain 11:8 13:23 15:3 16:21 17:8	23:4,15 24:12 73:25 77:15 87:6 103:10,21 107:24 115:10 117:15,18 118:12,14 123:14 123:19 124:18 134:2,4,12 136:9 136:18 139:3 140:4 145:17 146:19 147:8 148:22,25 149:16 150:19 151:1 152:22 169:4 174:23 176:18 177:8 179:8,16 183:21,24 185:5 185:23 186:22 188:3,7 189:20 190:5,9 191:4,22 193:23 200:11 205:7 206:22 212:15 213:5 certainly 206:12 certification 19:12 28:11 36:17,25 37:2,11,20,22 38:1 38:6,8 39:1 40:4 49:23 50:9 51:14 52:2 53:1 54:20 55:15 56:7,20 65:12 66:5,23 67:21 82:13 86:2 93:13 94:3,24 99:3,11 103:3 104:18,20,21 105:1 106:15,18 107:2,12 108:4 110:7,11 111:22 113:9,11,13 114:11,22 115:9 115:12,12,18	118:19,22 119:9 121:6,25 129:3 137:16,25 138:23 141:25 145:4,7,10 145:19 152:7,10 154:9,16 155:21 156:7 158:16 160:11 164:5 165:3 166:4 168:21,25 169:17 170:1,5 205:5,11 205:12,18 206:18 206:22 214:17,19 214:25 215:15,18 certifications 19:18 35:19 36:2 36:4,6 37:15 38:12 40:15,19 52:17 54:12 102:20 104:12 108:1 114:18 123:25 137:14 138:4 145:14 certified 37:13,25 39:6 40:1 53:25 109:17,23 150:25 154:15 160:23 214:14 certifier 111:24 114:6 certify 218:6,23 222:5 certifying 112:14 114:23 115:16 chain 3:8,8,11,13 3:14,18,18,19,21 74:20 100:9,10 119:23 121:12 135:25 146:6 148:9 155:8 186:5 188:17 191:13
c			
c 2:1 58:3 64:15 138:14 139:2 161:10 202:4			

193:17 200:16 chance 144:13 149:11,22 change 19:21 20:7 24:5 27:18 28:23 34:10,21 35:6 36:11,12 43:17 55:2,9,15,19 56:17 57:7,14 60:24 61:3,10,15 65:13 65:19 70:8 125:14 139:12,15 144:19 161:4 166:5,9 172:8 185:3,13 190:5 199:2,14 200:5 203:23 221:5 changed 21:17 25:20 28:24 43:15 65:22 86:20,23 193:1,2 198:14,16 209:3 changes 31:19 57:16,23 87:14,16 108:6 166:13 184:22 185:11,12 187:4 220:12 222:9 changing 39:15,17 99:17 134:17 186:24 characteristically 131:18 132:16 characteristics 70:19 80:10 characterization 107:7 152:3 characterize 54:7 62:23 107:8 109:9 109:14 110:4 111:23 173:21	174:5 192:1 characterizing 141:11 charge 26:9 32:9 34:1 76:12 150:16 150:17 151:6 chart 3:15,23,23 3:24,24 66:3 67:19 88:8,10,17 164:4 208:2,18 209:9,21 210:24 charter 27:23 28:6 charts 88:12 207:22 check 73:9,12,25 98:3 checked 73:5 checks 73:21,22 73:24 74:4 203:21 206:9 chemical 181:5 202:9 chemicals 202:14 chicago 2:5 child 52:8 155:18 chlorine 28:11,15 49:19 50:6 55:8 71:14 81:11,21 95:15 122:15,23 129:5 131:21 133:2 142:12 147:19 162:7,15 163:12 165:6 168:14 201:15 choice 54:16,19 choose 98:13 chosen 131:4 chris 25:25 74:19 75:11 92:22 140:21 146:22	christianson 4:14 6:6,9,12 77:24 chung 101:14 circular 10:17 circulate 95:9 circulated 172:6 circumference 46:17 circumstances 196:2 city 2:15 civil 1:2 clamping 116:17 117:8 clamps 116:7,12 116:14 117:4,8,11 117:14,22 118:7 clarification 138:16 clarify 5:4 70:23 129:18 160:25 clarifying 153:3 clark 27:6 103:2 120:16,24 122:10 137:24 138:3 146:22 148:9 149:3,20 153:2 156:13 157:8 clark's 36:16 155:7 class 4:9 classification 28:12 49:17,18,21 49:22 50:1,7,10,15 162:1 196:6 classified 50:2,4 105:10 clear 49:4 129:23 187:17 closed 44:24	closing 156:13 clyde 26:1 coating 44:4 code 95:16 129:6 codes 31:1 36:18 cody 26:5 coe 130:4,6 131:13 coil 45:9,12,12 47:18,21 81:3 142:13,20 cole 1:4,4 13:22 214:5 collect 138:18 212:2 collected 91:4 104:16 college 8:21 color 52:21 169:1 colors 52:15,19,20 122:15,24 156:16 166:17 168:25 colortech 87:1,4,7 87:15 combination 98:22 166:17,25 167:5 174:15 203:24 204:5 205:1 combined 53:13 come 5:19 20:9 25:20 33:4,15 34:5 36:8,9 66:20 67:5 77:15 89:2 109:4 111:9 122:14 189:20 comes 36:9 coming 101:16 158:7 comma 211:7 commenting 133:16
---	---	---	--

[comments - considered]

Page 9

comments 68:15 68:19 94:15 commerce 191:1 commercial 196:10 commercially 87:10 196:9,19 commission 219:11 222:19 commitment 23:15 committee 22:22 23:18 25:17,18,23 26:4,8,12,14 61:22 61:24,24 62:5,15 62:20 96:16 125:18,20,22 126:1,9 127:23 128:2,19 188:25 195:8 198:1,4 199:6 committee's 62:6 committees 126:7 207:5,8,10,12 common 53:17 54:8 communicate 137:18 147:17 communicated 108:14,22,24 communication 149:19 communications 130:16 132:2 133:11 companies 175:5 186:19 company 8:22 13:23,24 145:20 179:10	compared 44:15 95:15 129:5 177:17 comparing 88:12 150:13 comparison 86:1 179:18 comparisons 180:15 compete 114:17 competed 29:24 competent 4:17 competing 145:12 competition 182:2 competitive 28:13 54:11 131:19 132:17 170:9 174:19 179:24 180:2,14 competitor 88:25 89:4 competitors 54:12 87:24 88:4,19,22 89:7 163:11 174:25 175:3 180:8,16 182:6 compilation 3:6 3:16 41:17 170:17 complaints 77:17 77:19 complete 5:9 8:11 159:23 completed 4:25 34:11,13 153:17 175:18 189:12 completion 198:20 compliance 30:8 31:2 35:24 36:19 109:25 186:24 192:4 193:3	compliant 106:2 106:17 153:9 166:2 187:10 190:1 192:14 complied 187:2 complying 181:17 components 13:10 compounded 87:11 computer 212:1 concentration 8:8 concept 195:5,6 205:3 concern 39:25 46:19 47:19 66:13 66:20 94:7 99:11 104:25 105:2 109:3,12 114:7,9 115:10,11 121:4 122:18,21 133:18 133:19,23 134:11 137:23 139:23 145:9 147:22 150:6 155:14 156:6,9 157:19 161:24,25 181:21 186:12 concerned 39:14 39:16,24 67:3 145:2 concerning 103:3 146:8 157:9 concerns 40:4 56:8 61:16 66:22 66:25 82:19 83:8 93:23 94:3 100:12 113:10 115:8,16 120:4,12 121:18 125:13 130:17 132:9,20,24 133:7 135:17,19 136:5	138:1 146:11 153:8 157:14 160:12 180:4,5 186:21,22 188:20 191:18 192:24 193:1,21 197:15 202:12 conclude 158:6 concluded 144:4 174:22 concludes 120:25 137:17 concluding 131:19 conclusion 59:10 72:23 95:8 192:16 conclusions 59:25 83:25 182:19,22 183:7 concurrently 215:22 conducted 123:4 183:16 conference 92:14 102:6 103:13 confident 121:1 confidential 89:18 configurations 59:22 188:8 confirm 89:22 103:17 146:10 148:14 206:18 confirmed 131:25 conform 43:3 connection 207:9 consensus 28:17 96:18 97:20 177:4 consideration 105:1 114:4 considered 84:12 84:15 182:24 202:6
---	---	--	--

[consistency - cyclical]

Page 10

consistency 69:6	95:2 130:13	correlate 70:18	cross 3:3 14:18
consolidate 38:21	136:14 138:2	correlation 176:23	15:2 16:25 21:13
consultants 179:2	145:18 151:8,15	corrosion 189:17	27:1,4 46:16
consulting 55:7	177:3 202:5	cost 11:24,25	47:17,20 177:22
consumed 69:21	converting 200:4	28:12 31:21 38:23	183:12 214:1
consumer 50:11	203:13	45:4 84:19 215:12	crosslink 135:7
50:12 207:3	cooler 190:22	costs 43:24 45:2	172:23 176:12
consuming 69:4	coordinate 68:5	215:24	183:8,9
contact 136:12	100:15	counsel 4:17 5:16	crosslinking 135:6
137:4	coordinating	6:18 218:22	crr 1:19
contains 44:4	102:5	country 77:16	cured 202:9
content 102:8,11	coordination	county 1:19 218:2	curious 7:8
135:7	101:19	218:5 219:13,14	current 46:19 49:5
context 156:4	copied 103:7	couple 5:18	51:9 55:9,11
continually 190:4	121:13 122:10	130:12,13 213:22	60:20 80:3,8 81:6
continue 19:16	200:17	214:6	81:20 82:4 83:1
23:6,10 65:13	copies 122:11	coupled 54:13	83:14 93:12 94:23
216:15	copy 123:12	court 1:1,22 34:25	95:14,15 129:3,5
continued 21:12	129:22 171:5,6,8	122:4 165:17	130:14 144:12
29:3 65:19 84:3	corner 43:8	218:12 220:20	147:18 150:12
160:18 178:25	corporate 30:11	cover 87:7 158:22	159:16,18 161:13
continues 35:12	31:3 32:14 179:14	170:18 197:9	161:21 162:2,11
49:7	corporation 8:25	covered 31:23	163:19 172:18
continuing 57:5	9:18 10:10 13:9	covering 171:19	174:14,18 177:18
79:21 113:11	correct 26:10	covers 169:9	179:18,23 180:1
214:18	44:13 55:13 84:6	cpi 38:9,14 71:19	180:25 181:8
continuously	99:19 104:5 106:3	123:20 131:16,17	currently 8:9 64:1
140:1	108:23 109:16	132:1,16 150:16	73:6 172:20
contributed 204:1	116:6 117:23	150:24 151:6,20	195:18 196:17
control 32:12 70:9	133:5 141:11	151:23 152:11,16	curves 180:1
70:21,24 71:4,6	150:18 153:25	152:20 196:15	cushion 215:8
72:3 73:15 74:4	154:17 155:10	cpi's 38:9 151:17	customer 33:9
83:7,17 118:5,9	161:1 165:9	crack 134:18	78:8,19 79:6
203:21,22	198:22 214:15	cracking 189:17	195:19
conversation	215:23,25 222:6	cracks 135:2	customers 78:24
73:25 96:14 114:8	corrections 6:10	created 89:21	145:16
114:16 120:15	133:9 220:5,8	criteria 45:7 49:8	cut 10:19 129:21
147:15 184:21	222:9	49:10,11,22 55:10	cyclical 183:9
185:1	correctly 38:19	56:13 110:9	
conversations	45:10 76:1 143:4	critically 181:1,13	
40:3 88:15 91:6	192:18		

[d - determinations]

Page 11

d	days 220:16	defendant 1:12	deponent 216:25
d 21:24 218:4	deal 110:25	2:13 218:20	218:7,19 222:3
damage 66:7	139:25 140:2	defense 55:1	deposed 4:12 6:21
dare 32:9	145:20	defensive 99:4	deposing 220:15
data 53:12,13	dealing 15:18	definition 18:24	deposition 1:14,17
105:13,16,20,25	111:22 112:10	175:2	4:19 5:12 6:5,16
107:10 121:3,5	139:24 140:9	deflect 112:25	6:19 7:4,10 77:20
122:15,23 123:7	158:13	113:2	90:14 218:10,15
134:14 138:15	dealings 87:15	degradation 44:19	220:4,13,17,18
142:2,2 149:13,24	111:14,20 121:24	degree 51:13 52:1	depository 212:16
150:8,14,15,20	137:1,7 139:9	delay 142:16,18	depression 204:10
151:6 164:21,23	189:2,6	144:1	derek 31:4,5
166:18,24 167:1,1	debbie 74:10,11	delays 142:19	describe 7:2 10:7
167:5 168:4,5,12	december 9:22	deliver 36:23	13:17 20:16 21:7
database 212:23	12:10 20:8 21:21	162:19	21:18 22:24 30:4
date 5:23 25:7	28:24 29:12 34:13	deliverable 46:24	31:9 32:11 35:22
89:20,25 123:11	34:22 149:3 153:2	47:16 51:24	44:8 63:17 118:24
163:5 189:12	155:8,15 186:11	162:19	169:11
208:5 220:10	decertification	deliverables 27:24	described 13:1
222:14	67:6	28:4,8 43:9,13	14:15 15:1 23:11
dated 3:11,13,17	decided 49:9	45:1 46:14,14,18	35:9
91:23 103:20	176:24	51:11,17,20,21	describes 42:16
119:24 121:14	decio 24:9	demonstrate	78:19
124:1 136:2	decision 41:5,8	109:22,24 110:21	describing 173:14
140:18 146:7	54:16 61:15 72:6	demonstrated	description 132:3
157:9 197:10	72:8	172:24	design 11:13,13
198:15 200:19	decisions 62:6	density 135:7	30:10 31:6,12
203:2	decker 8:24 9:1,17	depalma 2:4	44:18 197:21
dates 25:13 34:16	9:21,24 10:10,16	dependent 52:5,15	201:8 206:21
101:1	11:1,22 12:3,8	52:19 53:2,16,20	designated 178:23
dave 89:21 147:19	13:2,9	54:4,14 55:8,16	detail 10:7 13:17
david 1:14,17 3:11	deem 107:11	156:12 167:1,13	166:19
3:17 4:1 13:22	111:10	168:9 172:17	detailing 42:19
29:17 92:22 120:2	deemed 12:6	176:15	details 56:2 85:3
148:8,23 157:7	106:17 156:1,9	depending 207:10	118:8 130:15
218:6 220:2 221:2	166:2 181:16	depends 82:18	131:7,12 135:5
222:2	220:19	133:24 206:15	137:10 140:5
day 1:22 48:5	defect 205:6,14,22	depict 210:2	171:24 188:3
103:3 218:13	206:7	depiction 208:9,23	determinations
219:5 222:17	defects 4:10	211:3	40:14

determinative 176:25	159:17 195:7 196:5 201:23 204:5 205:1	23:1,2 24:18 26:2 27:13 33:2 35:9 35:15 36:6 52:9 59:21 60:19 80:21 84:2,2 87:9 99:8 101:15,15,16 102:1,1 116:17 118:14,15 131:2 160:9 168:6 188:8 190:2 191:24,25 203:17 207:12 216:13	disadvantage 169:18
determine 16:5 31:15 36:21 70:14 187:11	developing 11:15 12:18 13:3 17:17 147:24 159:6 194:18	differentiation 170:2	disagree 82:9 83:24 84:9 103:23 173:13,18,19 177:25 178:2
determined 96:2 134:9 161:12,19 176:24	development 3:6 3:14 10:10,19,21 11:6,7,10,17 14:19 17:22 22:11 23:1 23:3,7 28:21 32:20 36:22 41:16 42:18,20,22,24 43:4 49:2 50:20 50:25 51:20 61:5 61:13 79:24 89:19 91:8,12 92:5 99:2 126:22 127:16,23 128:19 158:23 172:20 188:25 195:4,5 197:22 198:8	difficulties 70:18 72:15 172:15 173:23	disagreement 104:1
detrimental 139:16		difficulty 172:20	discard 153:7
deutsch 2:7 3:2 4:6,7 34:24 35:4 41:13 43:11 60:14 60:17 76:5 85:10 85:11 91:17 100:5 112:7,22 113:7,22 115:5,22 116:4,5 119:18 122:3,8 126:18 129:16 135:23 140:14 146:1 148:4 152:8 156:23 157:3 158:20 163:24 165:16,23 170:13 177:12,13 184:2 188:13 191:10 193:13 194:2,8 197:5 200:14 202:23 207:19 208:15 209:18 210:21 213:14,20 214:7		disclose 114:23 145:16	disclosed 114:13 disclosing 112:24 114:5,7,9
	dewalt 10:14,19	direct 3:2 4:5 16:23 30:20 48:17 96:24 136:25 137:7	disclosure 105:2 115:8
	dezincification 184:7,14,16,19 186:13,20 187:3,5 187:14 189:17 191:1 192:2,21,24 193:4	directed 140:20	discomfort 112:24
dev 3:7,9	diameter 68:20 72:17 77:4,12	directing 155:9	discounted 176:20
develop 51:6 55:7 56:12 63:7 96:7 133:1 162:14 163:16	diameters 63:21	direction 22:9 218:17	discuss 25:8 38:8 151:5
developed 27:25 28:14 63:11 71:13 72:12 85:21 86:13 101:4 151:9	die 68:22	directly 17:13 31:7,8 47:12 136:10 141:16 189:4	discussed 38:12 47:24 138:5 150:10 152:9
	differ 173:25 215:4	director 17:22 19:23 20:2,9,18 21:1,8 24:14 28:22 29:9 30:21 31:23 34:8,17,21 209:3,25 211:2,5,7	discussing 94:14 139:14 214:8
	difference 53:15 167:12	directors 23:22 24:1	discussion 41:2 88:15 94:11,21,25 98:9 107:16
	differences 175:24		discussions 55:25 132:3 139:11 153:6 184:17
	different 12:4,5,6 18:6 19:15 21:17		disinterested 218:24
			dissatisfactions 130:17
			distributed 32:5
			distributors 200:10
			district 1:1,1
			distrust 112:21 113:19 139:22

[divided - email]

Page 13

divided 22:8 dlt 51:12,25 52:3,4 55:2,8,9 57:7,15 57:20 65:13 144:16 147:18 148:11 157:9 165:4 167:2 169:6 172:17 176:15 dlts 169:1 document 7:7,9,11 7:14 28:3 41:15 41:22,24 42:3,9,16 46:25 58:10 60:11 67:24 71:24 78:2 84:1 90:12 91:21 91:24 92:1 100:8 100:11 102:18,21 102:22 103:2,8,12 103:22 107:13 121:17,21 124:4 126:21,25 127:12 128:20 130:1 136:3 140:16 146:4,9 148:6,13 148:17,24 149:1 157:12 159:2,4,11 161:10 164:1,8,11 164:19 169:15 170:15,19,22,25 175:12 177:10 179:20 188:15,23 193:15,20 194:14 194:17,22,23 195:14 197:9,12 197:14 200:22 202:25 203:5,7 208:21 212:21 documents 5:17 5:18,20 6:3 62:8 124:7,12 129:19 211:18 212:7	doering 17:16 76:18 92:9,21 94:18 96:3 140:22 146:23 184:6 200:18 201:11 doing 10:25 35:17 39:20,21 59:11 67:4 73:11 79:15 99:18 119:15 190:17 191:23 220:9 domestically 31:14 donkey 142:14 143:1 dosage 85:16 135:9,20 dose 177:16,19 dot 111:2 double 38:1,5 doubt 106:20 doug 22:3 doug's 22:4 dow 130:23,24 131:3 196:17,22 196:23,23 dr 18:3,13 101:9 101:10 drafts 90:3 draw 68:10,14 78:12 80:1 drawing 71:1 drawings 212:25 drawn 68:16 70:20 drew 69:12 drive 2:4 driven 61:16 dropped 37:20 38:18 204:13	ducking 111:24 112:1,11,17 due 8:14 49:15 95:13 153:8 165:4 166:13 172:21 191:1 199:1,3 duly 4:2 218:7 durability 109:13 109:15,21 110:1 durapex 88:18 152:20,23 durapipe 71:13 duties 9:10,23 12:14 14:22 19:22 21:7 22:8 28:22 30:4 32:13,16 34:20 35:7 60:23 61:2 76:13,15 duty 114:19	166:12 214:8 earliest 25:7,11 early 5:22,22 6:15 7:21 17:6 58:6 66:4,11,18 67:20 128:17 eckerly 22:3 education 8:16 educational 8:4 effect 154:16 204:23 effective 12:1 efficacy 106:21 efficient 61:11 effort 42:19 131:24 133:5 134:7 efforts 60:1 65:17 112:24 162:21 186:12 eft 155:3,4,5 ehrlich 1:18 218:4 either 31:20 36:6 94:13 218:25 elaborate 12:17 elected 41:2 electric 8:23 9:5 9:11,15,16 13:2 electrical 8:9 electron 135:5 174:17 electronic 63:4 elevated 190:23 eliminate 159:18 159:22 elkhart 1:21,22 218:12,12 else's 116:23 email 3:8,8,11,11 3:12,13,14,17,18 3:18,19,21 95:10
		e 2:1,1 3:16 21:24 22:1 43:24 45:2,4 46:12,15,19 47:2,4 47:9,17,25 48:7,12 58:3,12,18,19 59:10,13,15,18,23 60:2,7 68:23 69:1 69:4,14 70:7 73:3 83:5,16 84:13,16 84:22 85:15,19 86:4,8 135:10 161:11,13,17,21 170:17 171:10,13 173:15 174:3 175:1,10 176:1,6 178:17,24 179:5 179:11 221:3 earl 27:7 48:9 103:2 191:14 earlier 90:1 128:24 144:3	

[email - exhibit]

Page 14

100:9,14 102:4 103:7,8,9,11 119:23,23 120:1,7 120:12,24 121:12 121:13,14 122:9 122:12 135:25 136:1,8,20 137:19 138:7,13 139:5 140:19,25 141:4 141:19 142:10 144:8,25 146:6,7 146:13,21 147:13 148:9 149:3,8 153:1 155:1,7,8 157:8,23 158:6 184:4,10 186:5,11 188:16 190:8 191:13,14,17 193:17 200:16,17 201:11 emails 138:8 188:19 213:4 employ 142:23 219:2 employed 137:15 employee 136:24 139:8 employees 67:25 encompass 12:21 88:18 encompasses 41:17 91:20 119:21 126:23 129:19 148:11 157:10 158:24 164:2 170:19 184:8 191:12 194:11 197:7 200:20 203:3 207:25 208:19 209:22 210:25	encompassing 100:8 193:15 encountered 26:16 encourage 137:18 ended 34:16 engaging 124:9 137:24 engineer 9:12,14 10:1,2,6,7 11:2,3 12:16 29:23 36:19 47:25 48:9,15 147:4 engineering 8:8 20:3 29:10 31:23 34:9,18,21 35:3,3 35:5 55:7 209:12 209:25 210:12 211:2,6,7,10,13 212:6,22,24,25 engineers 11:13 30:9 31:7,8 75:4 75:12 english 218:16 entire 47:18,21 73:12 134:2 155:11 169:7 entirely 7:25 137:19 entitled 50:19 79:23 85:12 88:8 123:24 129:19 170:6 180:23 182:18 198:23 200:18 environmental 202:12 equipment 84:13 176:1,2 179:11 equivalent 169:22 errata 220:7,9,12 220:15 222:11	escape 24:11 escaping 22:4 26:7 essence 22:19 33:6 35:16 38:23 53:7 167:8 169:5 174:2 203:15 essentially 60:8 111:23 151:19 establish 183:8 estimated 165:5 ethical 115:6 ethyl 46:2 europe 175:5 european 89:13 evaluate 26:13 118:6 143:22 190:4 evaluated 33:20 43:22 evaluating 62:1 150:23 evaluation 34:6 144:2 evaluations 87:22 evenly 47:17,20 event 154:18 219:1 everybody 14:3 20:23 24:5,25 25:20 89:1,14 90:9 92:11,19 93:3 101:17 147:15 175:8 212:10,17,23 everybody's 89:9 213:4 evidence 69:7 evident 69:3 evoh 45:21 46:1 evolution 119:4	exactly 14:24 17:5 24:5 29:19 42:1 42:13 44:10 53:21 62:9,10 64:4 66:18 71:5 75:21 76:14 87:17 106:23 107:18 118:16 151:12 152:13 170:9 185:24 190:5 203:25 205:15 exam 3:1 examination 3:2,3 4:5 56:7 214:1 examine 151:5 examined 4:4 examining 141:24 exceed 178:8 exchange 140:19 141:6 excuse 177:11 exec 92:24 executive 3:7 92:5 95:20 96:15 172:13 executives 92:25 96:21 127:7,17,19 exhibit 3:6,7,8,8,9 3:10,11,11,12,13 3:14,14,15,16,17 3:18,18,19,19,20 3:21,22,23,23,24 3:24 41:11 48:23 57:3 60:10 71:8 89:17 91:15,19 98:5 100:3 102:17 103:4 110:24 119:16 124:20 125:7 126:16,20 129:14 135:21 140:12,16 145:23
---	--	---	--

148:2,6 157:1 158:18 163:22 170:11,15 183:25 188:11 191:8 193:11 194:6 197:3 200:12 202:21 207:17 208:13 209:16,20 210:19 exhibits 3:5 existing 42:21 66:4,11 133:6 159:19 163:15 187:9 199:18 exists 111:4 expanded 29:5 expect 4:21 8:11 124:16 expectation 198:3 expected 155:5 expecting 190:1 expenditure 97:23 expensive 44:14 170:7 experience 132:4 experienced 131:15 172:16 173:23 expert 18:18,19,25 47:25 53:4 69:17 166:23 167:18 expertise 18:18,21 47:8 87:18 147:8 expires 219:11 222:19 explain 11:10 37:24 38:5 44:2 49:25 51:22 52:24 69:18 166:19 167:16 196:13 199:5,7 204:22	explained 38:11 explaining 199:5 explored 70:16 exposes 139:15,15 express 39:25 67:1 109:11 expressed 133:7 extended 178:21 extent 21:19 45:13 173:10 exterior 44:4 external 32:25 199:2 externally 31:15 extra 44:15 extraction 169:13 extrapolated 165:14,20 166:25 168:3 extrapolation 110:20 168:7 extruder 68:22 extrusion 68:19 75:2,4,14 202:14 204:5,20,23,25 205:2 f f2023 55:20 57:21 110:14 f876 55:20 56:15 57:21 110:13 183:11 face 111:21 203:1 facilitate 55:10 facilities 73:20 99:24 175:10 facility 74:7 84:16 179:13 fact 145:13,15 facts 133:15	factual 134:12 fail 109:12 149:12 149:23 150:6 155:25 156:6 169:6 220:18 failed 107:8,11 145:13,19 155:3 fails 155:11 failure 104:14 105:9,11 155:5,12 156:1 failures 131:16 fair 53:6 78:21 137:14 204:20 216:7 fairly 168:15 familiar 150:9 212:13 family 65:2 fan 99:16 far 35:6 62:11 64:10 66:17 152:12 215:14 fast 69:20 fayetteville 8:25 10:11 fear 40:10 feasible 108:17 feature 45:14 features 45:8 february 1:23 46:24 59:6 91:23 92:6 95:21 97:7 99:6 127:6,13,20 128:14,24 157:9 157:24 171:18 218:13 219:6 federal 1:24 218:14 feedback 79:6 97:5 177:20 201:5	feel 5:4 74:24 fell 93:24 field 32:23 131:15 fifth 73:6,14 figures 165:9 file 123:8 148:20 filed 4:9 files 146:17 148:7 final 144:8 180:23 209:24 finalization 201:8 finally 5:7 finathene 71:15 find 62:3 109:4 findings 84:9 106:10 171:23 172:9 174:11 fine 46:7 first 14:22 15:14 15:21,24 16:9 17:20,24 18:4 21:25 41:16 57:6 58:18 94:21 101:11 103:9 105:5 125:12 126:11,21 128:23 129:25 136:19,21 136:23 138:10 139:1,6 142:11 149:8 150:3 151:20 155:1,3 164:4,23 170:16 173:1 188:23 202:20 211:1 218:7 fit 208:10 fitting 187:5 190:15 fittings 116:7,12 116:14,17 117:5,7 117:8,11,12,14,22
--	--	---	---

[fittings - go]

Page 16

117:24,25 118:1,7 184:14,19,23 185:14,16 187:2 187:12,17,20,23 188:1,4,9 189:3,10 189:13,19 190:24 191:23 192:24 193:7 five 43:13 45:1 98:25 136:19 183:6 194:3 213:15 flexibility 80:9 87:23 88:3,9,12 214:21,22 flexible 74:23 80:16,20 floor 81:1 flooring 44:25 florida 75:25 flow 3:15,23,23,24 3:24 61:16 flowchart 164:15 flowing 44:6 flw 1:2 focus 7:18 8:2 10:13 16:1 28:19 37:7 64:23 65:8 74:17 147:5 focused 61:6 66:15 70:6 210:14,16 focuses 78:16 focusing 24:13 61:8 118:18 follow 113:5 127:6 128:13,15 following 62:2 67:13 70:5,11 94:16 125:18 128:8,11 136:16 139:19 152:14	175:19 179:21 205:7 follows 4:4 22:19 force 61:12 foregoing 218:10 222:5 forget 160:9 169:25 form 222:9 formal 128:5 formula 134:7 formulation 52:10 71:11,12 87:14 134:6 161:13,21 161:23 162:11 163:16 174:18 177:18 178:9 200:19 formulations 85:12 131:2 forth 11:19 58:11 120:15 123:22 124:13 125:10 190:21 forward 16:5 17:18 23:6 24:18 43:18,20 91:12 96:18 97:16,21 98:14 99:9 104:11 104:13 105:6 166:7 197:23 found 133:3 four 139:6,11 frame 83:16,20 153:21 free 5:4 193:5 205:14 206:7 freestanding 99:25 frequency 183:19	frequent 183:7,12 friday 147:21 friendly 81:21 front 41:19 92:4 194:10 full 47:24 197:24 fully 5:1 function 33:21 35:22 135:9 210:13 212:20 functional 14:18 15:2 16:25 21:13 27:1,4 functions 23:13 30:6 31:9,22 35:25 funds 97:23 further 59:14 135:4 174:10 213:20 216:25 218:23 future 55:11 159:19	67:3 69:17 80:17 80:18,18 101:2 106:11 112:21 113:19 119:5 160:14 169:10 177:3 190:19,20 202:13 generally 97:14 134:25 generate 170:5 generated 150:20 168:3 generation 172:19 195:24 gentleman's 87:5 getting 15:10,12 36:24 37:14 103:18 108:6 111:18 121:25 144:24 145:3 164:15 171:5 187:2 189:24 201:15 give 5:6 6:19 15:17 53:1 71:18 74:9 85:8 144:12 215:8 given 23:5 30:19 48:1 53:16 72:22 80:2 124:15 133:6 201:15 218:18 222:7 gives 202:18 giving 137:20 139:19 141:20 go 8:24 9:1,3 23:19 28:19 60:18 62:24 76:6 108:3 113:13 114:11 115:18 123:10 180:21 196:8 201:3 202:7
		g	
		gage 2:14 gain 16:2,6,8 96:18 garden 1:21 218:11 garnered 201:6 gary 17:15 21:3,4 25:25 92:21 96:11 96:14,23 97:4 140:21 141:17 184:5 gate 22:25 gel 86:1 93:23 94:1 135:7 178:10,11 183:15 general 18:23 29:1 35:16 40:10 52:9	

[go - iapmo]

Page 17

211:25 215:14 goal 11:23 16:13 28:14,15 162:13 162:17 201:15 goals 58:6,10 goes 23:16 49:7 87:12 152:13 159:18 161:20 176:3 179:19 196:14 going 4:19 5:5 6:19 17:18 28:19 39:20,22 42:8 43:6 48:14,15 57:16 62:20 65:13 74:22 78:12 83:10 101:17 102:23 108:15 109:1 111:25 112:4 113:8 120:15 142:16 143:7,16 144:2,6,7 150:6 153:19 156:5 164:13 167:20 171:13 175:8 181:19 191:22 196:1 199:12 200:5 201:22 206:5 207:21 good 4:7 60:12 82:16 133:3 177:7 209:6,6 214:3 goodling 29:17 92:22 gotten 90:10 govern 206:3 207:13 grab 66:4,11,19 grade 196:19,20 grades 131:19 132:17	graduated 8:5,6 8:21 grand 2:15 granted 111:3 granzow 30:25 35:23 184:5 190:8 greater 43:19 greenberg 2:4 grostefen 149:20 153:1 group 26:12 27:21 30:10,11,12,14 32:19 33:5,7 34:6 36:10,15 61:8 93:2,11 94:19 125:16 140:20 141:6 211:13 grow 16:19 49:16 growth 134:18 guarantee 205:13 205:21 206:6 guess 7:8 21:20 22:13 27:16 46:9 53:23 54:9 56:10 78:18 86:8 98:17 105:23 142:15 146:16 149:7 156:20 160:6 178:3 guidance 40:19 guide 11:13 guys 115:25	happened 26:20 57:22 95:4 119:4 happening 67:1 138:22 156:15 hate 109:9 hawk 10:17 hawn 31:2 32:8 hayes 26:1 head 6:1 14:9 23:25 28:1 45:6 47:14 52:23 64:16 86:19,22,25 88:11 98:4 110:17 124:7 143:5,18 170:8 193:10 200:24 215:7 headed 36:15 headhunter 13:20 13:21 headline 131:6 headquarters 29:23 142:15 179:15 heads 23:12 health 207:2 heard 152:22 heater 12:15 13:3 13:11,13 heaters 12:22,24 heating 9:2,3 12:9 held 105:17 125:17 171:18 200:9 help 16:5 31:15 32:20,23 44:5 70:14 111:13 134:19 137:13,15 164:16 172:3 helped 96:7 helping 32:21 36:21,21,23 68:3	helps 33:21 hereunto 219:4 hey 7:17 high 8:5,5 82:4,10 83:6,16 84:19 135:13 140:23 177:17 178:4 209:7 higher 49:16,18,20 50:14 134:18 162:1 167:3 196:6 highest 98:2 168:10 hilton 1:21 218:11 hire 19:16 hired 13:18 historical 151:17 history 8:4,21 37:11 71:11 85:15 103:24 104:1 hold 80:9,25 96:2 155:12 holds 80:20 honest 120:25 honestly 48:4 144:20 146:13 house 43:21 80:22 84:16 hoxie 8:5 huffines 26:5 huh 57:11 59:5 81:9 83:4 92:3 100:17 214:12 hypothesized 172:21
	h		i
	half 18:12 214:9 hand 43:8 108:14 219:5 handling 102:1 happen 57:12,13 143:7 153:20 156:17 215:4,9		i.e. 23:5,6 135:11 176:1 iapmo 37:19,25 38:18 39:6 99:3 104:20 105:2

108:4 113:1,13,20 113:24 114:5,6,11 114:13 115:8,15 115:19 118:21,23 119:1,6 120:16,19 121:1,15,25 138:10 145:7,9 154:6,7,11 160:11 160:21 214:15,18 215:5,22 iapmo's 154:9 iba 179:9,10,12 idc 186:1,2 192:6 idea 25:8,12 54:17 63:5 76:23 77:25 88:22 96:9 110:18 125:19 127:10 141:7 171:9 173:8 183:18 186:10 189:9 196:16 ideas 16:7 159:10 identification 41:12 91:16 100:4 119:17 126:17 129:15 135:22 140:13 145:24 148:3 157:2 158:19 163:23 170:12 184:1 188:12 191:9 193:12 194:7 197:4 200:13 202:22 207:18 208:14 209:17 210:20 identified 58:19 128:24 129:11 138:19 181:9,11 identify 73:5 79:4 ignorance 158:9	il 2:5 imagine 103:4 145:2 immediate 142:12 impact 47:9 66:6 156:2,10 167:7 176:6 impacting 161:18 166:18 imperative 220:14 imperil 121:5 impetus 172:14 173:20,22 implement 107:17 140:10 162:14 implemented 111:6 182:25 183:4 implications 82:13 importance 140:23 176:21,22 important 93:4 133:25 improve 31:20,21 49:4,9 58:20,24 131:22 133:5 134:19 190:5 improved 42:20 51:13 52:1 60:3 improvement 3:16 46:12 58:3,12,17 170:17 171:10,14 178:17 203:18,23 204:19 improvements 161:11 inability 66:6 inaccurate 90:17 inadequate 165:10 inch 43:19 63:8 72:18 214:9	include 110:1 116:7 134:7 169:1 included 97:22 130:3 186:4 188:17 including 83:23 121:13 inclusion 69:8,23 incompliant 184:25 incorporate 41:5 incorporated 54:13 159:10 incorporates 67:25 incorporating 22:18 increase 8:16 increased 61:16 85:16 183:22 independent 52:14 52:18,22,25 53:8 53:19 54:3,13 151:24 156:12 167:1,12 168:4,12 independently 216:1 index 3:1,5 indiana 1:20,22 8:10 218:1,5,12 indicate 165:25 indicated 94:5 149:11,22 150:4 198:14 indicates 50:10,12 146:16 181:1,15 indicating 43:7,10 150:5 180:6 indication 142:21 144:4,5	individual 22:10 207:16 212:5 induction 9:15 69:16 172:23 industrial 179:9 179:10,12 industry 114:20 114:25 177:17,20 178:5,6,6 206:23 207:9 inform 152:19 information 69:12 72:21 91:3,5 194:19 informed 20:25 128:15 inherent 174:15 174:16 205:22,23 inherently 206:1 inherited 38:2 initial 16:7 17:1 18:15 22:5 119:6 201:5 initially 16:22 21:19,22 43:14 212:4 initiate 156:16 initiated 8:18 34:3 42:11,13 96:9 171:9,11 initiation 27:5 28:4 initiative 7:17 24:25 56:6 59:11 59:13 160:5 163:19 187:11 initiatives 22:14 24:16 25:2 128:9 128:16 160:4 164:16 171:19
--	---	--	--

[inn - job]

Page 19

inn 1:21 218:11 inner 181:2,14 input 78:21 95:25 inquiries 112:11 inside 44:6 174:4 inspection 117:16 118:15 installation 33:18 76:22 116:15,20 117:23 instance 84:23 103:24 166:11 instances 54:3 instructions 111:19 220:3 intensity 84:22 85:19 135:9 interacting 27:14 interaction 28:2 87:1 130:8 interactions 137:10 interacts 59:16 interested 219:1 interface 17:23 87:4 interfaced 17:9 interfacing 17:13 18:1 internal 30:8 44:9 59:14 90:3 115:6 213:1 interview 13:19,25 14:2 20:22 71:23 72:12 74:19,21 75:10 76:17 78:19 79:19 interviewed 20:23 68:1 interviewing 75:6	interviews 67:25 68:4,8,12,17 71:2 71:10 72:13 79:15 79:18 introduce 199:17 introduced 13:18 introduction 199:11,13,23 201:6 introductions 12:20 inventory 199:18 200:3,9 investigation 131:17 192:13 invite 96:20 invoices 36:9 involve 11:4,22 78:9 involved 10:8 12:17 15:4 17:1 23:21,23 24:21,24 25:3 35:18 36:14 37:2 40:23 43:4 68:3 72:6 79:9,16 84:21 87:22 101:9 101:12 127:4,8,14 127:15 150:22 167:13 178:21,24 179:2 184:13 188:19 190:17 194:18 198:17 involvement 13:3 74:12,14 147:7 involving 126:13 irradiate 135:12 irradiated 177:18 irradiation 86:10 135:6,10 174:17 177:15 179:11,19	island 179:14 issue 33:18 46:19 81:12,14 82:6 84:21 95:13 111:2 152:7 198:8 issued 61:24 90:4 90:22 107:12 125:1,1 152:11 166:4 183:14 issues 19:12 32:22 32:23 37:14 83:19 85:19 87:7 95:25 97:11 118:18 124:15 139:20 184:13,16 187:15 195:17 206:23 item 45:1,9 50:19 50:24 51:19 54:25 55:1 56:11 58:3 66:3,11 136:21 138:14 147:22 items 43:13 61:14 136:19 147:16 174:12,13 182:23 iterative 163:18	69:12 70:25 71:23 72:12,22 75:9 76:19 83:22,24 89:19 91:6 93:17 95:20 99:13,22,23 99:23,23 100:1,18 101:6 102:17 103:23 104:8 107:13,20,25 108:9,14 109:3,6,7 109:11 111:13,20 112:9,20 113:18 115:14,17 123:25 124:9,15,21,24 125:9 126:22 134:17 139:16 140:8 142:12,20 143:3,4,9,22 144:19 146:8 154:20,22 158:13 160:14 161:4,16 164:2,17 168:23 170:18 172:6,24 173:2,9,14,25 174:6,22 175:23 177:6,8 180:6 181:19 182:25 183:14 216:3,5 jana's 18:17,20 39:19 84:9 95:19 99:19 101:23 139:15,21 140:2 171:12 173:8 january 12:12 59:6 89:20 90:22 90:22 210:24 jean 2:14 jersey 1:1 joan 27:7 146:14 job 9:17 12:9 13:14 14:10,13,20
---	--	--	--

[job - leaks]

Page 20

20:20,22 29:14,24 34:21 jobs 13:1 28:24 34:8 35:18 198:14 joel 26:5 joined 16:9 208:4 joke 143:1 158:11 jpbradshaw 2:16 jpolakoff 2:11 jr 164:21,23 judy 1:6 july 126:22 127:5 129:9 131:10 132:6 jump 61:20 june 121:14 124:2 125:5 209:22 210:3	knew 6:23 know 4:17,24 5:8 5:23 12:5 15:18 15:24 16:11,24 18:22,24,24 19:2 23:24 24:1,3,8 25:10,17 26:15 27:2 28:14 35:6 38:3,15 39:22 40:7,8 44:14 45:16,17,19 46:1 46:23 47:10,14 48:1 50:21 54:21 55:3 57:22,23,23 59:9 60:5 61:25 64:10 66:8 67:8,9 68:24 69:15,21 71:16 72:8,21 73:8,17,21,22,23 73:25 74:1 75:5 75:22,24 76:14 77:19,21 81:17 84:5,9 86:4,17,20 86:23 88:2 89:1,6 89:7,9,11,14 91:3 93:16 94:14 95:19 96:1,9 97:25 99:12 101:1 103:6 104:3,4,6,9 105:3 105:13 108:3 109:7 113:9,18 114:2,19 118:6 120:21,22 121:24 122:6,21 123:5,10 124:9 125:14 126:2,6,14 128:14 128:17 130:25 133:14 134:14,20 134:25 136:22 137:2,20 139:7 141:10,23 143:6,6	144:21 147:2,8 148:19 150:16,21 151:1,9,15 152:6 152:23 153:5 161:3,15 165:1 168:18 170:9 171:9,19 172:1 173:7,10,12,17 174:6,22,24 175:9 175:13 176:17 178:7 181:7 183:1 183:4,6,12,15,16 185:24 187:6 189:7,8,12 190:12 190:13,17 191:2,3 195:12,20,22 199:18,24 201:16 204:24 205:9,10 205:15,25 206:5 207:7 208:10 210:7 212:22 213:7,10,13 215:4 215:8,14 216:11 knowing 105:3 173:17 knowledge 59:14 75:2,14 77:5,14 90:23 144:12,16 knowledgeable 47:11,15 48:12,14 74:4 known 206:23 krazit 146:22 147:2,3,4 178:18 184:6 krazit's 146:25 kshamberg 2:6 kunder 21:22 kyle 2:3 3:4 214:2 214:4	l l 219:9 lab 17:10 30:8,9 31:2 32:9,9 72:1,4 laboratories 15:9 19:8 89:19 102:18 124:1 labs 15:19,25 18:13 19:5 lake 1:20 218:2,5 219:14 large 72:17 218:6 larger 68:20 77:4 77:11 larry 4:7 75:15 76:7 lasting 166:16 lasts 167:5,10 late 142:5 214:10 215:20 lathrop 2:14 lathropgage.com 2:16 launch 198:24 199:1 201:10 launched 131:22 201:2 lawrence 2:7 3:2 4:6 lay 28:3 81:2 layers 176:3 layout 210:8 ldeutsch 2:10 lead 14:18 16:25 18:15 21:12 193:5 leader 10:3 11:21 88:24 201:19,24 leads 15:2 48:6 leaking 77:17 leaks 77:3,11
k	k 21:24 kansas 2:15 keeping 90:2 kelly 1:7 136:22 136:24 137:1,8,9 149:20 153:1 ken 18:4 27:10 34:3 101:10 kept 128:15 200:9 key 78:3,16 103:14 kimberly 1:4 kind 7:11 11:18 23:2 59:14 91:11 101:18 127:6 137:10 164:4 185:1 189:13 201:5,25 210:5 212:16 kindergartner 168:19		

learn 84:3 158:17 179:7	lifetime 104:15	93:13 99:1 111:4	41:14,21 42:8
learned 84:3 131:17 201:4,13	lifetimes 165:5	121:2,15 144:10	46:11 48:22 54:24
leave 9:16 12:8 13:13	light 115:16	154:6 156:12	78:1 85:13 88:7
lebanon 72:2,4 75:4,13	limit 158:4,5 159:23 192:20	159:15 160:13,20	88:17 89:16 91:18
led 135:13	limited 75:3,6 199:20	160:21 172:17	91:21 100:6
left 8:24 9:1,2 75:18,22	limiting 161:14,22 162:5	176:15 215:10	102:14,16,25
legal 2:19	limits 167:4	listings 19:15 36:4	119:19,20 120:3
length 47:18,21	linda 1:5	38:21,22 42:22	121:8,10,16
lessons 201:4	line 11:18 48:10 48:16 63:18	50:20,24 51:19	123:23 126:19,25
letter 132:5 133:7 133:20 134:16 135:4	104:20 117:6	52:20 53:2 54:13	128:20 129:17,24
letting 143:10	135:10 136:23	54:14 55:12	135:24 136:3
level 23:15 28:11 28:12 49:21,23	155:11 167:8	214:23 215:9	140:15,24 146:2,9
50:1,4,15 75:13	169:7 194:1 221:5	lists 43:1 46:14	148:5,13 157:4,12
84:22 85:19 86:4	lines 10:14 11:8 31:24 32:2 65:23	49:8 78:20 103:24	158:21 159:1
86:6,8,17,18 97:25	200:6 212:8	182:22	163:25 164:7
98:2 109:21 135:9	link 183:12	lite 2:4	170:14,21 181:24
135:16,18,19	linking 47:20 177:22	litedepalma.com 2:6	184:3,9 188:14,18
141:13 162:1,19	links 46:16 47:17	litigation 74:12 211:14	190:4 191:11,16
162:20 163:1,3,6,9	linx 185:22	litigations 74:15	193:14 194:9,13
163:11,18,20	list 27:23 76:7 98:7	little 9:4 111:21 174:10	197:6 200:15
168:19 170:5	listed 37:18,19 41:19 43:2 49:10	llp 2:14	201:4 202:24
178:4,10,11 180:8	49:11 51:9 104:2	locate 211:15	207:20 209:19
180:19,20 182:7,8	123:2 125:12,22	located 72:1,4 179:12	210:22
182:8,13 183:15	125:24 140:23	location 10:12	looked 6:8 7:8
201:25	155:17 160:19	locations 29:22 206:9	40:13,14 110:15
levels 66:23 86:1 118:14 172:23	173:3 209:25	locust 2:9	171:17 182:11
176:12 183:10	215:21,25	long 43:24 45:2 101:11 110:21	202:10,15 212:6
liability 76:20	listing 36:13 38:24 52:5,7,14,15,19,22	148:19 173:8	looking 42:10
life 93:25 109:18 110:3 165:13 199:21	52:25 53:10,16,19	199:24	51:21 56:12 78:10
	53:20 54:4 55:8	longda 192:6	78:12 79:17 83:13
	55:11,16 57:5	longer 40:23 51:13 52:1 111:4 166:16	110:25 137:12
	64:20 67:10,21	167:5,9,10	149:18 168:20
		look 5:17,20 6:3 8:20 26:9 31:19	174:24 216:8
			looks 40:18 100:14 103:6 120:14 150:11 157:20 158:14
			loop 44:24
			loops 81:1
			lose 114:21 215:9

losing 40:4 93:12 94:3,23 99:11 129:2 loss 66:5 lost 112:5 lot 13:10 19:14 30:15,17,18 46:7 126:5 185:1 186:2 188:4 189:15 206:16 207:11 216:12 lots 54:2 low 45:9 133:12 181:1,13 lower 31:20 43:8 131:18 132:17 158:4,5 180:7 181:14 lpi 157:25 lpl 157:25 158:2 lunch 115:21	175:11 194:24 202:4 203:16 malm 23:16,17 24:8 25:25 92:21 97:19 manage 33:22,23 56:13 137:13 158:15,17 164:16 managed 29:3 management 8:15 19:24 20:10,19 21:9 22:16,17 24:14 28:23 208:22 210:1,11 211:13 manager 14:14,16 14:23 15:1,22 16:10,20 19:21 31:1,2,3,4,6 32:12 32:15 34:4 35:24 74:20 75:7,16,19 76:8,11 208:21 209:2 managers 21:10 21:15 22:6 24:20 29:1 35:10 208:7 209:13 managing 13:4 34:1 manufacturability 31:20 manufactural 11:14 manufacture 64:1 108:18 117:10,12 175:6 187:18 188:4,6,6,7 manufactured 9:15 11:25 13:10 31:12,18 32:5 63:25 73:19	153:12 187:24 manufacturer 54:20 112:13 181:21 manufacturers 89:13 185:19 193:3 196:24 197:1,2 207:15 manufactures 31:13 117:7 118:1 161:7 179:10 manufacturing 10:1,11 11:2,3,7 11:10,16 12:16,19 29:21,22 74:7,24 75:2 152:20 187:19 206:7,9 marathon 8:23 9:5 9:11,16 13:2 march 9:7 25:6,14 26:20 27:5 102:17 103:20 125:7 190:7 191:14 200:20 203:2 marginal 81:10,18 181:4,20 marginally 81:16 mark 27:6 36:16 36:18 103:2 120:16,24 122:10 137:18,24 138:3,5 146:22,25 147:2 147:20 148:9 149:3,20 153:2,3,4 153:14 155:7 156:13 157:8 158:8 marked 41:11,15 89:17 91:15,19 100:3,7 102:15,16 119:16,19,21	121:8,11 123:24 126:16,20 129:14 129:18 135:21,24 140:12,15 145:23 146:3 148:2,5 157:1,4 158:18,21 163:22,25 170:11 170:15 183:25 184:3 188:11,14 191:8,11 193:11 193:14 194:6,9 197:3,7 200:12,15 202:21,25 207:17 208:13,17 209:16 209:20 210:19,22 market 2:20 16:2 16:6,8 49:16 88:24 117:25 133:22 201:2,10 201:19,24 marketed 88:2,21 marketing 145:20 198:24 marketplace 61:18 87:24 186:21 202:19 205:20 206:20 marking 153:11 153:24 marks 106:18,18 154:3,9 martin 23:19 24:2 24:8,9 92:22 97:6 mason 25:25 74:19 75:11 140:21 146:22 master 87:12 205:2 212:23 matching 182:1 material 68:21 135:2,3 174:16
m			
m 2:8 22:1 maintain 50:20,22 50:24 51:19 67:10 99:1 104:17 108:1 159:14,16 160:20 164:5 maintained 36:5 maintaining 19:18 35:19 42:21 133:25 137:14 160:12 maintains 205:11 maintenance 55:10 61:5 168:24 majority 36:3 making 58:23 63:6 69:2 94:14,15 96:10 107:3 129:23 159:9			

[material - mischaracterize]

Page 23

189:16 192:18 196:23 materials 74:24 174:20 186:14 189:11 211:15 mathematician 168:17 matt 147:4,10 178:18,20 184:6 matter 4:3 53:3 115:24 214:5 218:9 matthew 147:3 matthew's 147:6 mature 11:24 61:5 61:7,14 mba 8:9,11,14 mccoy 1:7 34:3 mcmahon 1:5 meadow 4:8 41:15 41:18 48:23 54:25 57:3 58:1 60:10 64:18 67:24 68:11 71:8 72:11 74:18 76:16 79:22,25 84:1 85:6 88:6 89:17 91:19,20 97:12 98:5 100:7 100:8 102:3,25 103:9,19 119:20 119:21,22 121:11 123:24 125:13 126:11,20,23 128:21,25 129:18 129:20,25 131:5 135:25 138:8 139:4 140:16,17 143:19 146:3,4 148:6,12 152:25 155:1,8 157:5,11 158:22,24 159:13	161:9 164:1,3 169:16 170:15,19 173:16 177:14 182:18 184:4 186:5 188:15 191:12 193:15,16 194:10 195:11 197:7,8 200:16,21 202:25 203:11 207:24,25 208:17 208:19 209:20,23 210:23,25 213:8 220:1 221:1 222:1 mean 15:9 17:3,11 23:15 26:2 33:8 35:15 36:8 39:17 49:18,20 50:5,14 59:4,7 62:11 64:16 66:17 69:19 70:23 73:23 79:13 79:16 85:21 86:6 86:10 87:16,17,17 90:19,21 95:5 96:25 97:20 100:13 103:9,25 104:4 107:10 108:18 109:14 110:12 111:7 122:6 124:6 132:13 140:7 145:11 146:15 148:18 150:11 151:8 152:13,22 153:14 154:1 155:4 158:3 172:3 172:5 178:11 180:14 181:22 186:6,23 188:4,6 190:2,3 198:10 202:5 203:22,24 204:4,24 205:18	205:24 206:7 210:7 211:17,23 212:12,19 meaning 36:5 54:19 155:20 166:22 178:7 199:13 means 11:11,12 18:25 22:24 50:14 81:18 141:10 155:5,23 168:16 197:19,20 199:9 205:19 meant 51:6 measurable 132:1 133:17,22 134:10 measure 69:20,24 133:3 135:1 measurement 176:23 177:5,7 measures 182:24 medders 1:6,6 meet 49:10 104:14 110:10 176:14 meeting 92:13 95:1,4,8,9,21,25 96:2,10,17,20 97:7 97:9,10 100:15 125:16 130:2,6,10 131:10 135:5 146:8 147:16 160:1,8 171:18 172:16 173:24 181:17 188:24 189:1 195:1 198:4 203:9,10 205:18 meetings 136:15 138:2 198:7 meets 205:4 megarads 178:8	members 17:8,11 24:10 25:17 26:3 26:3,4,25 27:1,4,8 27:9,17 125:2,22 126:1 memo 95:10 memorialize 95:3 95:6 memorializing 147:14 memorized 190:20 memory 42:11 85:18,25 121:23 131:9 mention 204:18 mentioned 11:20 32:8 39:4 187:25 merely 104:23 merged 167:6 168:11 met 5:16 28:10 130:4 137:9 176:17 metal 188:9 method 69:20,24 70:13 michael 1:5 micron 192:20 mid 2:19 142:5 middle 137:12 193:17 mind 112:2 mine 136:10 minimize 199:2 minimum 104:15 165:20 168:5 minute 194:3 213:15 mischaracterize 216:4
--	---	---	--

[misinterpreted - nibco]

Page 24

misinterpreted 161:2	multitude 54:5 multiyear 36:7	156:21 160:16 200:2	19:1,16,20 22:19 25:8,21,24 28:20
mission 27:20	n	needs 33:14	31:13,16 32:6,25
missouri 8:23	n 2:1 21:24 219:9	negative 82:3,13 202:15,17	33:22 35:18 37:3
misstating 134:13	name 13:21,22,24	negatively 166:18 167:7	38:14,20,25 39:4
mistake 209:15	14:7 18:4 21:25	negatives 81:7	40:3,13 41:2,6,16
mistaken 140:9	22:4 24:3 74:9	83:2,14	41:18 42:6,11,18
misunderstood 174:7	87:5 101:11,14	never 26:16	45:4 47:7,24 48:6
mitre 10:17,22	137:2,3 146:16	114:13	49:1,9,12,15 50:13
mix 116:23 199:3	152:23 185:23	new 1:1 9:25 10:5	51:18 52:2,17,18
mixed 117:1	214:3	10:9,18 11:6,8	53:17,24 56:19
mo 2:15	named 136:22	12:19 14:19 15:2	60:1 63:5,7,11,16
models 213:1	names 18:1 24:7	15:3 21:1,4 22:11	64:1,5,15 65:1,11
modified 65:22	24:11 26:6 30:22	22:13,22 23:9	66:14,22 67:4,25
159:22,25 160:7	74:8 89:1	24:10 25:16 26:8	69:12 70:3,9,14,22
moment 89:15	narrower 124:23	26:9,13 30:5	71:2,20 72:13
monica 1:5	nassrin 139:7,8	31:22 32:20 40:21	73:16 74:3 75:22
montague 2:8	149:10,21 150:4	48:19 55:7 61:4,8	78:9,20 79:14,23
montgomery 9:2	nationwide 4:9	61:13,22,25 62:4,5	83:9,23 84:12,15
months 57:9,22	193:5	62:15,19,25 74:24	85:7,12 88:2
morning 4:7	natural 114:17	75:7 79:5 85:22	89:12 91:4,5,12,20
motors 9:15	near 155:3	85:24 86:14 121:3	93:1,11 94:22
move 23:6 97:16	necessarily 33:12	121:5 127:23,24	98:13 100:8,21
97:21 197:22	33:17 59:3 64:13	128:2,19 159:17	101:7,19 102:6,18
moved 43:18,20	79:1,19 82:15	162:15 182:4	102:19 103:14,23
71:15 98:14	98:18,21 119:13	187:3,8 188:25	104:6,19 105:2
101:25 176:21	123:18 124:22	194:1 196:3	106:10 107:14,16
190:21 211:10	128:5 133:15	197:25 198:4	107:24 108:1,8,15
moving 24:18	173:21 180:9	199:6,15,17 201:6	109:12 111:6,14
91:12 99:8	182:10 186:7	203:14 204:3,5,7	111:22 112:10,23
mrاد 86:17	198:10 199:22	204:20,23,25	112:25 113:9,24
135:12,14,16	215:7	210:14,17 211:11	114:5,10 115:7,11
177:19,21 178:4	necessary 111:10	newer 187:2	115:15 116:19
mrads 84:23 85:17	201:12 220:5	nibco 1:11 3:6	117:4,7,17,21,23
85:17 86:8 135:18	need 5:7 96:15	4:10 8:15 9:3	117:25 118:11
mueller 186:4,8	109:22 114:22	13:14,15,18,25	119:1,22 120:18
multiple 38:22	121:3 138:15	14:11,17,22 15:4	123:12,18,20,25
117:24 176:3	153:7 154:18	15:14,22 16:2,9	124:10,16 125:6,9
196:24 197:1,2	156:15 181:25	17:2,8,20,24 18:10	125:10 126:2,5,12
	needed 6:10 93:21		126:23 127:17
	98:3 114:10 133:9		128:10 129:11

[nibco - object]

Page 25

130:2,21 131:15 131:17 132:1,9,16 132:20 133:12,21 133:23 135:6 137:4,12 138:16 139:23 140:2,10 140:17 141:9 145:18 146:4,8,25 148:11,12 149:2 150:17 151:19,22 151:24 152:15,21 153:6,12 157:11 158:24 161:5 162:23 163:2,3,13 163:19 164:3,17 170:19 171:6 172:6,6,16,22 173:11,23 174:1,4 174:14 176:13,24 177:18 178:3 179:23 180:1,25 181:8 183:2,14 184:15,17,20 185:13,20 187:13 187:17,24 189:7 189:13 190:25 192:23 193:7,16 195:18,20 197:8 199:25 200:2,8,21 202:3 203:3 207:25 208:2,4,19 209:23 210:6,25 213:12 214:5,14 214:17,18 215:17 215:24 216:9,17 220:1 221:1 222:1 nibco's 26:10,13 31:24 35:19 36:1 36:3,17 38:9 39:5 39:25 40:18 44:8 45:14 48:12 51:14	52:11 54:11 56:7 58:7 59:19 73:20 74:5 77:6,17 78:24 87:23 88:13 88:19,23 93:23 94:8 104:12,22 106:5,22 110:7,10 113:11 115:6,11 116:6,13 117:6,14 118:20 121:6,15 125:15 126:8 132:4 133:16 135:17 138:4 139:12,15 141:24 150:6,25 151:4 173:9 174:25 176:14 180:7,16 182:11 212:17 214:9 nine 182:22 noel 14:6 15:23 17:15 25:25 97:3 97:3 140:21 184:5 noel's 17:19 non 54:2 noncompliant 153:5 156:2,10 nonexistent 115:1 normally 62:14 178:5 north 8:25 32:6 notarial 219:5 notary 1:19 218:4 222:21 note 120:18 noted 216:23 220:12 222:10 notes 76:19 95:3 168:21 218:16 notice 1:25	noto 146:23 november 122:14 146:7 147:21 208:1 219:12 nowicki 26:6 npc 188:24 195:1 nsf 19:6,9,10,13,14 19:15,17 37:18,22 37:25 39:14,14,16 39:17,20,24 40:1,8 40:10,13 57:8,15 66:4,11,19,20 67:3 67:6 93:18 99:4 99:11,13,16,17,20 99:24 104:16,25 105:14,18,24,25 106:4 107:2,10 109:3,8,10,13 110:13 111:1,2,14 111:19,20,24 112:10,21,25 113:9,10,19 114:3 114:10 122:17 123:2,3,13,17 131:21 136:24 137:19,24 138:9 138:14,17 139:8 139:12,22,24,25 140:3,9,22 141:20 141:23 142:17,18 142:19,20,22,24 143:10,11,14,22 144:1,6,6,11 145:9 149:20 150:4 151:21 153:4,8,13 153:23 154:1,3,8 154:12,19 157:21 159:20,24,25 160:7,8,15 164:21 165:3 166:4 168:20 169:9,12	172:16 173:24 176:15 183:11 214:9,19 215:5,18 215:22 216:6,10 216:12,12,16,17 nsf's 106:21 115:9 115:12 123:4 137:4 nuances 35:15 number 41:18 43:7 45:8 46:8 48:23 50:16 53:11 58:10 60:9 65:25 76:6 78:2 82:25 85:8 136:23 137:17 138:7,13 139:2,6,11,25 140:17 147:17 157:10 174:13 175:20 176:8 177:15 180:17 182:14,15 183:6 202:19 207:14 numbered 136:19 numbers 91:20 119:22 126:23 129:21 146:4 148:12 157:11 158:24 164:2 170:8 184:8 188:16 191:12 193:16 194:12 197:8 200:20 203:3 208:19 209:23 o o 219:9 oath 4:21 object 83:24 111:25 112:16 113:2,15 114:24
--	---	--	--

[object - old]

Page 26

152:2 objective 164:5 176:11,17 189:21 objectives 176:9 observations 78:3 78:16 83:25 observed 68:20 72:17 176:12 179:21 obtain 215:17 obtaining 36:24 obtainment 55:11 obviously 4:21 89:21 93:4 102:5 104:11 111:18 occasion 150:22 151:5 occur 19:25 20:4 143:15,16 144:7 145:17 185:4 206:8 occurred 20:8 32:22,23 65:11 95:21 118:25 123:19 168:7 185:11 occurring 33:16 47:20 210:6 october 13:12,16 15:5 17:7,24,25 140:18 142:18 185:7 odd 111:21 112:12 112:20 odds 76:4 offer 9:17 12:9 13:14 49:16 offered 14:11 offering 49:6,9 offers 54:15	office 19:24 20:10 20:19 21:2,9 24:14 28:23 198:11 208:22 210:11 oh 20:17 65:6 104:3 154:1 185:17 oit 69:15,18,23 70:2,9,13,17 94:7 131:18 132:17 133:2,12 172:23 176:12,20,22 177:4,7 179:23 180:1,11 182:10 182:13 okay 4:17 5:14,17 5:20,25 6:2 7:2,7 7:16 8:2,5,18,22 9:4 10:4 11:4,9,20 12:2 13:6,15 14:2 14:5 15:1,8 16:20 17:17 21:18 22:2 22:5 24:13,20 25:2 26:8,16,19,23 29:9 30:1,23 32:2 32:16 35:2,14 37:7,8,9,24 39:9 39:11 41:1,5,24 42:8,15 43:1,12 44:11,21 45:14,17 46:1,3,7 47:4 48:19,22 49:22 50:5,10,16 51:5,11 52:3,4,6,11,16,21 52:24 53:6 54:10 54:23 55:6,18,23 56:5,10 57:19,25 58:16 59:4,9,17 61:2,20 62:24 63:2,5,10,14,21,23	64:3,9,14 65:9,10 66:20 67:14,24 68:10 69:18,23 70:6,11,13,21 71:7 72:6 73:13 74:3 74:17 75:15,18,20 77:9 78:9,14,23 79:2,6,9,13,21 80:14,21 81:4,16 81:19,25 82:3,12 82:16,19,24 83:10 84:7,18 85:5 86:4 87:6 88:2,6,25 89:11,25 90:4,7,9 90:12,16,21 91:1,7 91:11,18 92:1,13 92:17,20,24 93:9 93:22 94:3,7,11,17 95:3,20,23 96:5,7 96:9,13,19,24 97:2 97:5,14,18,22,25 98:12 99:19,22,25 100:6,16,20,24 101:6,18 102:3,8 102:11 103:6,22 104:6,10 105:8,12 105:19,22 106:9 106:25 107:6,13 107:23 108:8,13 108:25 109:11,21 112:8,23 113:8,23 114:13 115:6 116:13,23 117:2 117:14 118:13,18 118:24 119:3,10 120:6,7,11,18,23 121:20,21,23 122:9,25 123:9,23 124:15 126:2,11 127:4,10 128:4,7 128:13,18 129:13	130:16,20 131:13 132:8,15,23 133:10 134:5,9 136:7,25 137:5,7 137:11 139:23 141:4,8,15 142:8 143:2,18,21 145:8 146:15 147:5,13 148:16,17,20,23 149:1 150:22 151:3,14 152:25 153:23 154:4,7,11 154:14,22 156:19 157:17 158:5,12 159:5,9 161:20 162:12 164:15,19 164:25 165:24 166:5,19,21 167:11,16,22,24 171:17 173:19 175:3,16 176:7 179:1,9 180:6,22 181:24 182:17,21 183:6,22 185:3,10 185:20 186:17,18 187:23 189:5,24 190:17 191:21 192:3,23 194:2,21 194:24 195:6,10 195:16 196:2 197:6,15,25 199:8 202:24 203:18 204:2,18,22 205:9 205:17 206:4 207:7 208:16 209:1,19 210:14 211:8,25 213:10 214:22 215:17,20 216:19 old 199:14,18
--	---	---	--

oldsen 31:5 oliphant 18:3,13 27:10 101:9,10 ominously 202:10 once 48:19 64:25 106:13 112:15 189:24 195:6 ones 13:8 30:23 49:12 118:6 187:24 operators 75:5,14 opinion 64:13 opportunities 66:2 67:20 79:4 opportunity 49:4 58:20,24 opposed 63:18 64:6 89:8 128:9 163:12 178:4 optimal 42:20 option 38:25 104:13 107:1 108:5,16 109:2 125:12,13 126:12 164:20 options 98:7,8,12 107:15,17,21,22 107:24,25 108:10 108:13,15 125:4,9 143:8,9 147:21,25 orange 165:7 order 23:5 53:13 55:10 163:18 organization 29:20 99:22 118:13 207:11,23 208:10 210:3 211:4 organizational 35:8 207:21 208:1 208:17 209:21	210:24 organizations 126:6 206:25 207:12 organize 68:3 original 53:13 71:12 142:2 149:12,24 150:7 150:14,15 165:6 168:12 220:15 originally 161:16 outlined 167:15 output 59:24 70:18 79:18 outside 19:17 204:11 outsourced 123:6 overall 31:21 58:21 overbeaming 72:20 overnighted 142:11 owner 18:11,12,12 18:14 oxidation 69:9,16 172:22 oxidative 131:22 181:2,6,13 oxidized 68:21 oxygen 44:6	page 41:16,19 42:16 43:1 45:7 45:20 46:9,11,13 47:23 48:25 50:17 50:19,23 51:11 54:24 57:2 58:1,2 58:16 60:10,11 64:19 65:5 67:18 67:19 68:14 71:11 71:22 72:10,14 73:1 74:22 76:17 80:3,5 81:4 82:24 83:13 85:6 88:7 92:4 93:9 98:5 100:7 102:3 104:10 110:24 112:9 120:23 122:9 124:1 125:12 126:11,21 128:20 129:25 131:5 139:1,4 140:16 146:3 149:9,18 152:25 155:1 158:22 159:13 161:9 162:12 164:4,19 165:2 170:16,18 172:12 174:10 175:12,17 176:7,8 177:10 178:14,16 179:17 182:17,18 182:21 188:15,23 189:9 193:18 194:10 195:16,16 197:9 198:23,23 203:11 204:9 208:6,21 209:24 211:1 221:5 pages 46:10 48:24 76:7 169:16 180:21 222:6	paperwork 104:23 paragraph 49:3 56:11 58:18 131:14 132:10,15 134:16 137:17 142:11 144:8 172:14 parallel 143:12,15 143:24 144:3 parent 52:8 155:18 part 19:9,13 25:4 32:6 36:5,24 60:6 68:11 69:4,25 71:3 80:2 81:5 87:2,7,15 99:19,22 100:22 110:12 116:10,15 117:6 119:11 127:22 132:25 141:24 151:11,11 158:12 159:5,15 160:19 161:3 163:14 171:17 176:19 193:20 partial 93:2 partially 176:5 participants 178:18 207:8 participate 23:17 95:23 participated 127:20 participates 126:5 participating 79:17 164:17 particular 5:14 7:7 14:10 126:1 130:20 191:25 196:12
--	---	--	--

[particularly - pexc]

Page 28

particularly 104:24 158:14	179:2,4 199:17,19 209:9	101:19,22,22 150:5 218:24	158:22 161:7 163:12 164:6,16
parties 218:21	peoples 68:5	personally 207:6	169:23,24 170:4
partly 8:14	peperno 1:6,6	212:9	171:19 175:11
parts 42:9 80:22 116:23	perceiving 78:24	personnel 43:2	178:9 180:25
party 93:13 94:23 99:1,3 129:3 218:25 219:3	percent 64:8 76:21 135:8 144:12,14 152:17 155:6 162:16 169:4 178:12 179:16	71:2 72:13 130:3 144:9	184:23 186:7 187:17,19 188:1,5 188:9 189:14 190:15 199:22 211:23 213:11
pass 66:23 71:14 81:11 144:10 147:18 192:20	perception 82:8 91:2 216:8	perspective 32:21	pexa 202:2,3,4,9
passed 81:16 131:20 144:23 155:20	perceptions 91:6	petrochemicals 3:10 130:1 132:11	pexb 43:19 63:6,7 63:11,16,18,20,23 63:24,25 64:1,6,10 64:11 162:25 163:3 169:16,19 169:20 170:3,4,7 202:1
passing 144:13 147:25	perform 33:5 152:6 183:7	pex 3:6,7,9,14 4:10 15:10,13,19 16:1,3,4,14 17:10 18:22,23 24:16,19 25:2,9,12 26:19 28:5,15,18,21 34:9 35:19 37:3,5 39:5 39:25 40:4,21,23 41:16 42:21,24 43:4 44:3 45:5 48:8,16 49:1,5 53:25 54:2,15 58:7 59:19 65:2 70:3 71:20 76:8 77:2,6,10,17 79:9 79:23 80:18 82:12 85:22,23 86:1 88:13 89:18 91:12 92:4 93:10,23 94:13 95:13 96:16 101:7,19 113:11 117:13 118:2 121:2,15 124:10 125:15 126:4,8,21 127:25,25 128:21 130:11 134:6 136:11 138:4 140:22 141:21,24 147:5,9 148:10 151:4,7,10,18 155:11 156:15	pexc 3:19,20,22 7:13 28:10 44:8 44:16,17 54:11 63:18,20 64:6,10 64:11 70:14 74:5 74:14 82:16 83:9 84:24,25 85:7,12 85:20 87:2,23 88:19,23 89:8,11 89:14 94:8 98:20 104:20 106:22 116:7,12,13 117:11,15,22 118:7,19 121:6 127:16,21 128:8 128:16 132:4 135:17 152:16,21 159:16,17 162:13 162:15,18 163:4,7 163:20 169:19,21 170:3,4,7 172:19 174:25 175:2,3,6 175:11 182:11
path 16:5 42:20 96:18 98:24 104:11,13 105:6 135:8	performance 49:5 86:16 95:14 129:4 131:18 132:17 133:13 134:19 158:4,5 159:23 161:14,22 162:6 165:11 170:1 209:7		
patrick 3:12 18:3 18:14 27:10 101:9 101:25 146:7	performing 180:7 214:9		
paul 2:14	period 37:1,23 116:22,25 123:9 123:11 151:6,23 153:13,15 154:5 178:21 190:3,7 196:15 215:20 216:9		
pay 36:10 216:1	periodically 128:2		
payback 84:19	perkins 26:5		
pending 5:9	permeation 44:5		
pent 134:19,20,21 135:1	peroxide 202:9		
people 13:25 14:7 16:21 18:6 23:9 25:7,20 27:13 28:2,17 29:6 30:15,17,19 79:15 83:23 92:15 93:6 93:6 101:6,13,16 102:1,6 103:7,14 112:23 128:9 140:8 141:8,9 147:14 172:8	perry 6:21 31:3 32:11 33:21 60:18 perry's 34:6 person 18:15 47:8 48:11 74:3 100:18		

[pexc - potentially]

Page 29

194:11,19,25 197:1,10 198:8,18 200:19 201:13 203:1 214:10,14 phase 17:1,6 18:15 49:1 phases 23:1 philadelphia 2:9 2:20 phone 136:15 139:20 physical 123:5 pib 88:9 pick 38:25 picture 94:17 pinhole 77:3,11 pinholes 72:16,17 73:5 203:13,19 pinholing 68:20 pipe 43:19,21 44:1 44:12,14 45:8 46:16,20 47:17 66:22 68:21 69:8 69:9,25 70:19 72:18,18 73:16,19 73:20 75:5 77:4 77:13,17 89:18 104:14 105:10 106:4,5,22 109:4 109:12,17,22 110:3,7,10,18,20 111:3 119:11 126:13 131:16,17 131:19,23 132:1 132:16,18 133:16 134:1,10 140:23 141:21,23,25 142:3,16 143:22 147:25 149:12,23 150:6,17,24,25 151:4 154:7,15	156:8 159:17,17 165:14 166:11,16 175:24 177:16 181:2,14 196:9,19 196:20 pipes 88:8 152:11 165:11 pipng 45:15,18 47:21 117:23 197:2 place 1:25 83:7,18 105:5 118:15 145:15 160:11 placed 45:22 155:12 places 68:6 118:4 plague 111:5 plains 8:23 plaintiffs 1:9,21 2:2 4:8 214:4 218:11 plan 55:1,3 99:4 126:12,14 143:19 199:1 plant 74:20 75:15 75:19 76:12 138:18 plastic 13:4,10 187:21,24 platz 27:7 146:14 146:22 play 36:5 158:8 playing 76:4 plaza 1:22 218:12 please 5:3 119:20 138:9 220:4,9 plumbing 4:10 112:13 116:20 plus 142:19 154:12	pluses 80:4 point 14:3 15:7,11 17:14 25:1,19 26:1,21 30:15 37:19,21 38:20 39:7,13 46:20 54:17 56:18 57:19 58:5,14 61:4 64:22 65:7 68:18 69:2,10,14 70:6 71:12,14 72:1,15 73:3,4 75:1 77:2 77:11 79:13 81:10 81:19 82:3 83:5 83:15 84:12,15 85:4,15 90:23,25 94:21 95:12 98:16 99:5 101:18,22 104:17 107:3 108:2 113:24 118:20 122:16,19 123:16 124:13 127:22 130:8 137:6,11,21 139:22 141:12,15 142:4,6,24 143:21 143:25 145:8 151:22 152:18 155:15 159:24 160:2,6,10,21,24 162:9,17 179:22 179:25 195:3 198:25 201:3 203:16 204:1 209:8 210:6 211:4 pointed 205:10 points 57:6 84:2 98:25 99:10 157:25 159:21 168:5,11	polakoff 2:8 policies 39:24 54:6 93:18 159:20 207:14 215:4 policy 111:4 119:7 153:3 159:25,25 160:7,8 215:2,13 poly 187:20 polyethylene 177:22 polymer 169:14 polyolefins 3:10 polyphenylsulfone 187:22 portion 19:5,8 80:25 197:21 portions 173:18 posed 159:19 position 20:5 21:1 21:5 29:18 31:22 48:19 65:1 198:17 207:23 positions 30:23 positive 64:25 80:10 144:10 possession 211:16 possible 138:20 139:14 206:13,15 214:21 possibly 27:13 139:10 149:7 159:7 202:4 post 73:3 posting 20:21 postulates 83:21 potential 31:19 104:16 159:19 192:5 194:1 199:3 potentially 5:19 161:18 187:14 193:2
--	---	--	---

[power - product]

Page 30

power 10:14	pressures 167:25 168:2,6	problems 37:14 56:22,23,25 77:2,3	185:15 211:21
practice 179:19	pretty 114:16	77:6,10 93:20	produced 1:18
practices 172:9	previous 6:5 77:20	109:8 128:22,23	42:3 66:14 102:18
preceded 78:15	172:24	129:2,10 144:18	149:1 162:25
predates 173:11	previously 89:17	160:15 185:2	163:2,3 164:2
preference 115:23	102:15,16 121:8	procedure 1:24	172:5 185:14
preliminary 67:21	121:11 125:6	218:14	producers 117:5
premus 74:10,11	prim 175:4	proceed 62:20	185:17 186:15
preparation 7:3	primarily 10:14	98:1	product 7:13 10:9
prepare 5:15 6:3	17:13 32:4 36:15	process 3:16 22:20	10:14,18 11:6,8,17
prepared 92:7,8,8 198:24	44:25 84:19 101:7	22:21,23,25 42:22	11:24,25 12:20
preparing 90:13	180:19 188:10	45:4 46:12,15,20	14:19 17:22 20:2
present 34:17,22 35:12 96:3,4 99:5 195:8	primary 18:7	47:2,5,9,17 48:7	22:22 23:1,3,7
presentation	44:23 176:10	48:12 52:24 56:4	25:9,12,16 26:8
62:14 80:2,5 81:5	188:9	56:14 58:4,12,18	28:10 29:9 30:7,9
82:9,25 93:5,15	prime 137:4	58:19 59:15,18	31:1,6,8,12,12,23
94:12 96:10,15	printed 119:25	60:2,7 68:23 69:1	31:24 32:2,20
97:15 127:5,7,11	136:9 146:17	69:4 70:7 71:19	33:10,14,14,18
127:13,21 128:5	148:7,20 154:8,9	71:23,25 72:20	34:5,9,18 35:3,5
128:14,25 159:6,9	157:6	73:2 79:20 83:1,6	35:24 36:3,4,11,18
194:24 197:25	printing 154:19	83:9,14,16 84:24	36:21 37:12 38:22
198:2	prior 71:19 142:21	85:15 104:23	39:5 40:1 48:9,10
presentations	150:24 187:24	118:24 127:19	49:13,15,17 50:2,4
62:12,18 127:15	189:22	135:17 137:13,25	50:11,13 51:7,7,9
127:18	pro 185:15	138:3,23 141:24	51:10 52:7,13
presented 16:8,11	probably 17:16	156:12,21 161:17	53:8,15,19 58:7,21
92:10,11,13 93:11	18:7 25:6 26:6	170:17 171:10,14	58:25 61:5,6,7,9
94:22 95:25 97:6	27:6,10,13 28:6	174:3,19 176:6	61:13,14,17,22
97:11 98:6,10,24	54:21 66:23 74:7	178:17,24 179:6	62:4,5,15,19,21,25
107:25 128:1	74:9,10 124:25	189:25 197:23	63:7,12,14 64:7
195:1,14 198:5,8	133:3 166:20	200:8 201:14	65:2 66:4,6,12
presenting 75:10	168:18 205:19	202:13,14	69:6 74:5 76:8
83:3 92:25 94:18	213:5	processes 11:16	77:6 78:21,24
96:6 127:16 174:1	problem 93:10	12:19 59:22 70:10	79:13,19 80:3,8,11
presently 19:11	94:13 95:13	74:25 84:4 158:16	80:15,18 81:6,13
president 74:20	114:21 122:13	176:1,2	81:20 82:4,4,8,10
pressure 73:5,9,11	128:21 145:21	processing 161:11	82:12,14,17,20
167:3 168:10	180:24 181:9,11	161:13,22	83:9 84:24,25
	181:15 184:19	produce 64:5	85:1,22,24 86:2,9
	206:19 209:11	162:23 170:7	86:14,15,15,24
			87:13,21 88:3

[product - protect]

Page 31

89:12 93:13,25 94:5,9 104:18,20 105:17 106:1,13 106:14,15,19 111:10 113:12 114:2 115:9 116:21 117:6 118:19 121:6 123:5 127:23,24 128:2,19 130:22 133:6,6,21 145:5 147:4 151:18 152:20 153:4,7,9 153:10 155:24 156:1 159:14 160:13,20,23 161:14,18,22 162:2,5,15,23,25 163:3,4,7,20 164:6 168:1 169:7,19 172:18,19,22 174:15,25 176:13 176:25 179:23 180:1,7,13,17,19 181:5,8,16,20 182:1,4,5 184:24 186:23,24 187:10 188:7,25 189:7,21 189:23 190:12,21 192:15 194:1 195:4,21,24 196:4 197:1,21 198:1,4 199:4,6,9,11,12,14 199:15,18,23,24 200:6,10 201:1,6 201:20,25 203:16 203:17 204:6,7,19 205:4,5,10,13,19 205:21 206:2,10 206:14,19 207:16 211:2,6,7 212:8	213:11 215:19 product's 95:14 129:4 production 11:18 75:7 76:7,11 197:23,24 productivity 10:2 11:21 products 9:13,25 10:5,13 11:8 12:21 13:4 15:2,3 19:15 22:11,13 24:16 26:9,13,14 26:20 31:13,14,16 31:18,19,21 32:4 32:24 33:4,6,8,9 35:20 36:17 37:3 37:4,5 39:2 40:5 52:9,12 53:18,21 53:22,24 54:6,10 54:11 59:19 61:25 63:6,17 70:3 79:5 79:10 85:20 87:2 87:23 88:13,18,19 88:20,23 89:7,8,9 93:24 96:16 116:7 116:10,19 117:16 125:15 126:4 130:11 138:4 140:1 147:9,10 151:7 155:17,19 155:22 156:3,11 163:12,15 169:13 170:2,4,10 180:14 180:16 182:11 185:24 186:2,7,7,8 189:14 192:8 199:17 210:17 211:23 216:13 professional 8:8	program 3:6,9 14:14,16,23 15:1 15:22 16:9,20 19:21,23 20:10,10 20:18,19 21:1,8,10 21:15 22:6 24:14 24:20 25:2 28:22 29:1 34:21 35:2 41:17 70:1 71:4,6 96:7 126:22 127:16,21 208:7 208:21 209:13,25 210:11 211:13 programs 91:13 progress 23:2 128:16 progressed 17:12 18:5 project 3:16 7:12 11:3 12:16 15:13 15:19 16:1 17:10 18:2,5,16 23:6,9 23:21,23 25:4 26:22,24,25 27:12 27:17 28:5,16 34:10 41:3,19 42:17,17,23,24 43:2,4,9,13 66:1 87:3 97:17,21,23 98:2,15 99:8 100:21,23 101:3 110:2 119:6 124:19 125:2 131:22 132:25 139:13 146:8 147:5 151:12 159:14 161:10 162:4,13,18 163:14 170:16 171:16 172:7,15 173:15,20,22	174:11 175:18 176:9,11,21 178:16,17,19 179:1,3 182:4 197:16,18 198:21 200:19 201:21,22 210:18 211:12 216:6 projected 93:24 projects 10:22 15:6,25 17:3,4 19:17 21:14 22:10 22:11,20 24:18 29:4 42:12 58:7 101:7,20 124:10 136:11 140:1 172:24 173:3,4,7 184:23 187:7 210:15,16 promoted 19:23 20:4 209:2 promoting 40:8 99:13 113:20 115:14 promotion 12:6 20:6 31:5 promotions 12:3 proof 169:1 propagate 135:3 proper 83:7,17 properly 206:11 properties 174:16 proposal 49:1 56:3 proposed 65:23 109:3 112:9 125:10 propounded 222:8 proprietary 98:20 98:20 protect 156:14
--	--	--	---

[protection - recall]

Page 32

protection 44:15 44:18,23 protocol 187:1 proved 144:22 provide 33:6 55:6 107:14 147:20 201:5 211:17 provided 49:24 87:19 131:23 198:12 provides 33:24 215:15 providing 121:5 provisional 111:3 public 1:19 116:11 117:17 187:13 218:4 222:21 pull 111:9,11 147:20 pulled 190:11 purchase 189:21 196:18 purchased 19:4,5 32:25 63:24 152:15 186:9 188:10 189:7 204:25 purchaser 196:11 purchases 117:21 purchasing 189:23 pure 144:21 purpose 68:7 96:17 102:9 109:2 pursuant 1:23 218:14 pursue 16:14 115:15 214:18 pursuing 108:9 put 46:24 82:7 89:15 96:15 99:7 125:10 143:9	153:4 205:19 putting 71:1 80:22 104:4 154:1,3	r r 2:1 21:24 22:1 219:9 221:3,3 radiant 44:25 81:1 radiation 174:19 raised 115:16 raising 107:1 ran 59:21 150:16 randy 17:16 76:18 92:9,21 94:18 96:6 140:22 184:6 200:18 201:11 range 53:24 135:7 rate 135:10 rated 162:24 163:1 180:17 rating 162:16 163:12 rationale 58:17 ray 1:5 reach 80:21 reached 59:10,25 reaches 78:20 react 172:8 reacting 97:10 reaction 97:18 144:24 171:22 172:1,4,10 202:9 read 34:24,25 65:7 104:24 112:8 122:3,4 132:10 165:17 167:23 173:14 216:22 220:4 222:5 reads 41:16 57:7 58:19 74:23 75:1 85:7 126:21 158:22 159:14 161:10 170:16 179:18 195:17 197:9	reality 98:19 realize 182:9 really 7:6 14:6 28:25 32:4 58:24 59:3,11,13,13 66:10 67:19 70:25 77:18,22 78:18 79:12 81:18 98:16 102:10 105:20,24 108:5,17 109:2 111:15 132:12 139:3 145:11 149:9 155:15 156:20 161:20 168:13 172:7 174:2 190:10 206:17 208:25 209:12 211:6 realm 18:21 reapplied 37:21 39:5,6 reason 46:18 64:5 64:14 72:3 95:23 130:20 155:12 162:3 166:15 177:25 196:7 199:16 216:11,16 216:17 220:6 221:7,9,11,13,15 221:17,19,21,23 reasons 196:11 recall 6:13 21:18 27:2 28:8 71:21 82:22 85:2,23 87:25 88:11 94:10 95:2,22 96:13,23 97:13 98:9 107:18 122:20 124:6,6,11 127:18 135:19 136:10 138:1,6,12 139:10 140:11
	q qc 70:1 71:25 72:1 72:14 73:2 83:7 83:17 quality 9:12,13,25 10:5 11:5 30:11 30:12,14 31:3 32:12,15,21 49:5 58:20 61:8 69:6 70:9,14,21,23 71:4 71:6 72:3 73:15 74:4 106:21 107:4 118:5,9 177:1 181:5,20 203:12 203:20,22 204:12 quantify 167:20 quarter 72:18 question 4:22 5:1 5:2,3,5,9 70:8,12 83:11 94:16 103:15,16 107:1 108:21 111:15 112:3 113:6 129:4 129:7 149:16 152:4 160:9 186:17,18,18 205:17 213:6 questioned 107:4 questioning 107:5 questions 3:2,4 4:6 168:22 213:21 214:2,6 216:20,21 222:8 quiet 199:1 quite 48:4 144:20 202:10 quote 142:11		

[recall - region]

Page 33

141:22 144:24 145:1,11,22 146:13,24 147:6 147:11,23,24 153:6 154:21,23 159:4,12 164:12 164:14,18 174:9 177:9 183:3,5 184:12,13,16,23 184:25 185:5,8 188:22 189:4 193:23 214:11,20 receipt 220:16 receive 142:21 received 9:17 12:9 13:14 31:5 42:5 103:8 120:8,12 124:9,17,24 136:8 145:6 146:10,14 171:2,6,8 187:13 191:17 receives 86:11 receiving 142:22 180:3 181:24 recertification 36:12 37:2 113:1 113:25 114:1 155:24 157:22 recertified 114:3 118:21 119:1 150:25 215:19 recess 60:15 116:2 156:24 194:4 213:18 recipient 149:2 recipients 124:20 146:20 reciprocating 10:20 recirculation 162:16	recognize 41:22 43:12 91:22 100:11 102:20 120:4,7 121:17,21 124:3 127:1 136:4 140:25 148:17 157:13 159:2 164:8 170:22 184:10 188:19 191:17 193:19 194:14 197:12,14 200:22 203:5 recollection 135:16 171:21 recommendation 17:18 39:10 154:20 recommendations 171:12 175:19 recommended 69:25 134:17 143:3,4 recommending 67:11 71:3 120:20 reconsidered 202:3 record 6:11 62:4 63:2 84:7 108:24 116:4 129:19,23 151:17 218:18 recording 132:21 records 15:18 72:12 151:21 152:9 157:6 191:5 212:2,17 red 104:14 105:9 107:7 108:18 109:4 111:3 126:13 141:23 142:3,8 165:7,24 166:11,16	reduce 11:23 38:23 176:11 reduced 53:11 116:24 reduction 43:24 44:5 45:2 reel 73:6,7,12,14 reestablish 104:19 108:4 115:18 118:22 reestablished 119:8 reevaluated 119:7 refer 50:6 51:15 51:16 67:14 157:24 referred 125:20 referring 43:6 45:11 51:23 56:10 56:15 66:16 70:25 71:5 81:23 82:1 93:14 103:11 130:2 132:15 134:14,25 138:22 149:14 150:1,3,7 175:14 204:15 refers 50:7,21,22 51:2 55:3 56:14 66:8 68:11 69:15 71:16 73:8 78:8 103:1 134:20 136:21 139:6 161:15 162:12 169:3 175:13 188:23 190:13 200:25 204:8 reflect 136:16 reflected 83:25 97:11 110:19 125:5,6 131:7 132:10,24 159:11	173:15 reflection 203:20 reflective 139:21 182:5 reformulated 49:14 51:8 87:20 reformulating 49:13 reformulation 3:19,20,22 7:12,22 25:4,9,12 26:19 27:12,17 28:5,16 34:10 41:3,6 42:12 51:7 70:16 85:22 87:3,8,12 90:9 97:17,21 98:1,14 100:23 130:22 132:25 133:4 139:13 151:12 162:4,21 163:14 171:16 182:3 194:11,19 194:25 196:3 197:10,15,17 198:18 201:12,21 203:1 204:7 216:6 refresh 42:10 85:18 121:23 131:9 135:15 regard 36:20 regarding 4:10 15:25 81:19 130:11,17 152:10 184:14 194:25 207:14 215:2 regardless 156:11 regards 142:24 190:10 213:11 regimen 117:15,19 region 2:19
--	--	---	---

regression 166:18 167:7	reliable 176:23,25	119:3,14 120:9,13	15:21 30:6 31:7,8
regret 201:14	reliably 172:16	121:22 122:7,18	41:17 42:5 46:10
regular 136:12	173:23 176:14	126:15 127:3,4,9	48:17,25 50:18
rehau 89:3	reliant 151:22	127:12 130:6,8,10	51:18 58:2 59:4
reinstate 121:1	relocated 72:2,4	130:12,15,16,25	60:21 66:14 71:9
reinstated 122:1	rely 111:8	131:3,12 132:2,7	75:16 76:6 82:7
reinstatement	rema 21:22	137:3,9,22 138:1	96:24 104:7
104:22 121:15	remember 6:1,17	140:5 141:2,4,5	124:15 141:19
reissued 113:14	7:20,23 8:1 10:23	143:4 145:22	170:17 171:23,25
reject 109:4 140:2	13:24 14:3,6,8	148:1,18 152:12	172:2,8 178:15
169:7 172:9	15:6,16,20 16:16	153:22 157:16	180:3,23 182:19
rejected 108:14,22	17:3,5,21 20:15,23	159:7,9 164:11,15	183:13,20,23
related 42:12	22:3 23:24 24:3	170:25 171:1,3,8	reported 16:21
53:19 76:22 94:1	24:22,23,25 25:13	171:24 172:11	21:10,16 29:2
94:4,7 155:21	25:19,22 27:15,19	177:2,3 178:20,22	32:12,14 47:12
211:14	28:1,7 30:22	184:21 185:21,23	60:19 96:25 97:3
relating 4:3	34:15 37:16 38:17	186:3,6 187:9	97:3 128:18
relation 65:2	38:19 39:12,22,23	189:2,5 191:20,21	135:14 208:11
relationship 19:6	40:2,2,3,6,20,25	192:10,17 193:9	212:10
52:8 82:18 86:14	41:4,7 42:1,13	194:17,21,23,24	reporter 35:1
112:13 133:2	45:6,10 47:1,6,22	195:12 203:7,8,10	122:5 165:18
139:16 152:17,23	48:3 52:23 55:5	211:24 212:11,12	reporting 29:6
155:18 173:10	55:24,25 57:17,24	213:9,13	30:16 35:10
179:4	59:8,9,20,20 60:5	remind 111:2	141:16 209:9
relative 15:10	67:2,7,11,23 68:2	remove 153:7,10	reports 16:23
17:16 30:18 43:23	68:9,25 69:13,22	153:11 154:19	30:20 32:8 33:6
48:8 77:19 81:15	71:5 72:5,9,24	render 165:10	36:19 60:22 61:23
82:11 85:23 86:2	74:16 75:25 76:2	166:10	62:11 123:15,16
87:9,20 99:18	79:11,12,16 81:24	renewals 36:8	123:18,21 210:8
120:16 125:14	82:23 85:3 86:22	renewed 36:6	represent 4:8
134:4 144:18	87:5 88:1,14,15	37:22	214:4
165:21 168:17	90:8,11 92:1,2,11	renewing 36:24	representative
169:23 182:6	92:17,19,20,23	reorganization	126:3
184:22 185:1	93:3 94:6,10	210:5 211:9	represented
187:10 205:16	95:11 96:6 97:20	repeat 165:16	218:21
215:13 218:25	98:4 100:13 101:1	replacement	reputation 66:7
relatively 40:21	101:10,17 102:8	162:13,18	request 7:19 50:3
relevant 126:3	102:10,11,22	replicated 38:24	104:22
215:5	103:5 108:11,11	report 3:6,10,16	requested 34:7,25
	108:25 110:16	5:21,23 6:2,14,15	119:5 122:4
	111:7 118:4 119:2	7:2,5,18,19,21,24	165:17

[required - right]

Page 35

required 98:1 187:5 requirement 55:9 71:14 104:15 110:2 115:7 193:4 requirements 51:12,25 53:10 55:2 57:8,15,20 65:3,14,20,21 86:3 95:16 129:6 131:21 172:18 176:16 190:16 192:22 193:6 212:21 requires 36:12,13 165:20 resells 63:23 reserve 211:15,21 212:13 reserved 218:20 residence 135:11 219:13 residual 69:24 181:1,13 resin 42:21 49:1 79:24 98:21,22 130:14,22 131:3 134:18 195:19,23 196:6,9,12,14,17 196:20 203:14,23 204:3 205:2 resins 130:18,21 131:2 resistance 28:15 50:6 81:11 122:15 122:23 129:5 131:23 133:2 134:18 162:7,15 165:6 168:14 181:2,14	resistant 28:11 49:19 95:15 187:6 192:2 resold 63:24 117:17 resolve 32:22,24 33:3 172:15 resolved 77:24 122:22 155:13 resource 61:11 resources 61:12 75:3 respect 216:3 responded 97:14 104:6 174:6 response 141:18 168:15 responses 94:15 responsibilities 9:10,23 12:4,7,14 14:16 20:7 21:8 30:5 32:13,17 34:20 35:7 60:23 61:3 responsible 11:7,9 11:15,17 12:18 29:2,21 32:3 rest 125:17 result 21:11 60:6 61:6 68:21 72:19 113:20 173:22 results 69:3 105:14,16 123:12 142:21 143:7 144:6 150:13,23 153:17 163:8 178:10,11 181:4 181:19 182:10 189:11 retain 138:15	retained 164:21 164:25 retention 212:21 retested 119:11 retesting 36:13 retired 75:23 return 199:19 220:14 returned 33:4,5,8 190:24 returning 114:5 returns 34:5 76:20 76:21 191:4 review 3:7 4:18 5:18 32:24 92:5 128:22 138:9 160:1,8 reviewed 6:16 7:3 90:13 98:7 105:17 182:24 reviewing 120:5 121:19 124:5 127:2 136:6 141:1 146:12 148:15 149:15 157:15 159:3 164:10 170:24 184:11 188:21 191:19 193:22 194:16 197:13 200:23 203:6 reviews 23:4 105:25 127:23 revision 89:20,25 revoking 107:2 rex 24:8 92:22 97:6 rheem 9:1,3 12:9 12:10,15,23 13:2 13:11,13	rhode 179:14 richard 1:18 218:4 rick 14:6 15:23 17:15 25:25 97:3 97:3 140:21 184:5 right 4:12 5:12 14:20 15:4,17 17:16 18:25 22:4 23:13 24:4,11,12 24:19,24 25:22 26:4,7 27:10 29:10 31:25 33:11 33:16,22 34:12 36:8 38:3 39:2,7 40:11,22 42:6,15 43:8,10 44:24 45:13,13 49:19 53:9,25,25 54:21 54:23 55:4 56:2 56:20,25 57:10 58:8 60:20 62:11 62:11,16 63:3 64:17 66:18 67:8 67:11 69:21 70:12 74:1 77:20 78:25 79:1,3,18,21 80:19 80:23 81:13,16,17 82:7,14,22 83:3 86:14,16 89:3,23 90:5,19,20,24 91:4 91:13 93:1,3,7,20 96:12 97:17,23 98:17 99:11,14,18 99:18 101:4,14,17 102:6,14,25 103:4 103:8,9 104:3 105:20,23 106:5 106:12,24 108:17 108:25 109:5,9,18 110:16 111:8,16 111:24 113:10,14
--	---	---	---

[right - section]

Page 36

113:25 114:14 115:17 116:8,19 116:21,24 117:4,6 117:19 118:17,21 119:15 120:19 125:25 127:24 129:1,11 134:5 136:8,13,17 141:9 143:9,14,19,23 144:4,16,18,21 145:5,12 146:18 146:23 148:21 149:4 151:11,20 151:22,25 152:16 153:18 154:15 158:16 161:24 162:18 166:23 167:9,9,20,25 168:3,17 171:2 174:22 175:9 182:6 185:18 186:16 188:10 195:24 196:7 197:16 198:9,10 199:13 202:7,10 203:16 205:6,14 205:22 206:8,14 206:15,17,23 207:20 208:4 209:4 211:8,18 212:4,20 213:14 risk 66:5 93:12 94:23 129:2 160:21,24,25 187:14 195:17 risks 66:1,2 rmr 1:19 robert 1:6 roger 31:2 32:8 role 12:23 15:21 17:19 29:20 30:2	30:5 32:19 33:2 33:25 34:9,17 35:22 36:16 60:20 61:15 67:4 75:20 76:9 134:2,4 146:25 151:4 178:19 208:23 210:2 211:3,14 roles 12:2 18:9 21:20 rolled 199:10 rolling 199:1 room 92:14 round 147:18 rounds 131:1 routine 124:19 136:14 183:15,18 routinely 192:20 rules 1:24 114:20 114:24,25 115:3,6 218:14 run 143:12 running 199:14 200:5	satisfied 205:11 satisfy 110:10 saw 10:17,17,22 124:19 152:9 saws 10:19,20 saying 33:13 54:19 57:14 67:13 80:13 95:24 106:24 108:8 117:10,12 119:10 120:25 128:1 133:12,20 137:18 154:7 158:6 159:22 162:5 166:10 176:10 178:5 201:18 205:8 says 33:9 42:17 43:9 46:15 47:16 47:24 49:4,8,8 50:24 51:12 55:1 55:1,6 56:12 58:17 62:20 64:24 66:3,5,6,18,18 67:20 68:19 69:1 69:23 71:14 72:1 72:16,16,19 73:3,4 73:13 76:19,21 77:1,2,3,10 80:8,8 81:10 83:7,16 85:16 89:20,25 93:11 99:1,2 104:14 106:1,16 110:23 111:1 120:1 122:13 125:16 126:12 131:6,14 134:17 135:5 138:8,14 140:19 148:23 149:9,21 155:2,10 156:14 159:15 160:7 161:12	164:20 165:4,7,24 168:23 174:11,13 175:17 177:16 179:20,22,25 180:25 181:12 183:7 189:10 194:10 195:18 199:1,2 201:12 203:1,12,13 204:13 scenario 138:20 schedule 68:6 school 8:5,6 science 8:7 scope 31:24 35:16 42:17,18,24 scott 31:3 32:11 34:6 60:18 61:6 101:13 scott's 32:19 33:4 screening 131:1 screws 193:25 194:1 204:6,20,23 204:25 seal 219:5 search 211:25 212:1 213:4,8 searched 212:3 searches 213:11 second 8:2 42:16 46:15 68:18 69:2 77:12 81:10 95:12 102:3 104:10 120:23 122:9 131:14 142:10,13 149:18 152:25 159:24 160:6 172:12,14 179:22 189:9 193:18 section 68:13,15 71:8,10,25 72:14
	s		
	s 2:1 179:13 safe 104:17 safety 207:2 saith 216:25 sales 198:24 sample 66:4,11 104:16 138:15,17 138:19 155:3 164:22,25 165:4 189:19 samples 53:12 179:24 180:2 san 77:21,23 sarah 1:6 101:14 sat 207:4		

[section - sold]

Page 37

74:19 76:18,20 78:3,16 79:22 85:13 104:11 110:25 131:13 168:21 177:14 secure 144:11 secured 154:5 see 10:23 26:2 57:10 65:4 80:4 92:4 99:25 107:13 108:5 177:23 191:25 192:13 213:15 seeing 164:12 191:24 seek 99:2 113:24 seeking 56:19 112:25 seen 62:8 88:10 102:21,23 124:4 148:14 164:13 173:2 selected 20:25 98:24 196:13 selection 42:19 self 8:18 sell 31:16 63:15 64:6,15 66:6 145:4 152:21 160:22 196:24 200:2 seller 202:19 selling 64:6,15 133:21 sells 63:19 89:11 116:11 117:5 202:2 send 90:7 120:19 138:9,18 sending 103:1 136:1,20 141:4,5	142:16 sends 122:11 201:11 206:10 senior 12:16 93:5 93:6 96:21 141:9 141:10,13 144:8 sense 81:18 105:8 sensitive 174:18 sent 90:8 103:23 120:21 124:12 125:6 138:9 140:19,25 141:8 141:19 144:9,25 144:25 184:10 186:11 191:14 sentence 156:13 separate 61:4 separated 210:11 september 136:2 136:20 138:23 sequence 158:13 series 10:19 37:17 127:25 201:23,25 207:21 serve 210:18 served 72:22 91:11 server 212:1 services 33:7 34:4 55:7 set 45:9 58:11 85:24 86:17 96:3 142:2 149:13,24 150:8,14,15,20 166:24 167:1,1,6 168:4,9 201:3 219:4 setting 103:13 seven 107:14 108:9 125:4 143:9	sexton 27:7 48:9 48:17 103:2 191:14 shadowing 175:13 175:21,22 shamberg 2:3 3:4 213:22 214:2,4 216:19 share 16:2,6,8 49:16 106:9 114:22 123:18 139:23 212:18 shared 51:18 172:2 sheet 220:7,10,12 220:15 222:11 shifted 210:9 ship 142:25 shipment 142:18 shipments 189:24 199:3 shipped 73:20 74:6 142:13 short 60:13 156:22 shorter 179:23 214:6 shortly 208:4 show 67:18 99:8 207:21 209:10 showing 81:8 169:16 208:16 209:13 shown 92:14 167:4 209:14 shows 146:21 166:15,24 170:18 178:16 179:1 side 11:6 61:7,9 101:23 209:12 sign 23:13 62:24 63:1 216:22 220:9	signature 218:19 222:14 significance 7:9 significant 53:14 69:4,7 70:17 77:16 93:12 94:22 95:24 139:25 143:16 significantly 204:14 signing 220:11 similar 69:24 similarly 1:8 206:10 simpler 205:17 single 104:18 119:13 sit 126:7 167:16 175:8 site 75:6 situated 1:8 slide 98:6,10,23 204:2 slides 92:14 94:19 96:3 129:8,12 slight 35:15 204:10 slightly 33:2 60:19 64:19 190:22 slope 167:8 sloughing 68:21 slow 134:18 slower 202:13,14 smaller 63:8 smallwood 75:15 76:7 sminkey 1:5 sold 33:9 61:17 63:11,14,16,16 70:22 99:24 155:22 184:20
---	--	--	---

[sold - standpoint]

Page 38

187:13 190:25 199:25 202:1 206:14,20 solution 113:20 solutions 2:19 somebody 7:17 15:13 16:13 20:12 24:15 47:7,12 48:5 50:13 62:21 74:7 84:8 95:7 116:13,23 125:8 136:22 139:7 206:10 212:1 213:3 someplace 75:25 somewhat 122:6 157:18 soon 125:17 156:16 sorry 20:17 30:13 35:5 40:13 45:24 50:23 51:17,25 58:9,10 65:5,6,16 66:10 67:15 69:9 70:4 77:8 78:6,12 83:10,12 84:14 85:9,10 86:7 105:15 110:8 111:20 113:6 122:2,10 128:11 129:7 138:25 139:1 147:3 166:8 175:16 177:12 182:20 195:11 211:20 sort 48:6 102:5 119:3 156:7 200:8 source 33:1 83:6 83:16 104:18 193:7	sourced 31:15 118:6 185:19,25 186:20 sources 117:8,25 118:3 135:14 185:20,21 193:9 sourcing 186:15 south 8:10 space 220:7 span 201:3 speak 75:13 speaking 60:18 specific 14:13 17:3 17:21 25:13 28:3 34:16 51:24 56:2 60:5 77:14 88:1 95:2 97:18 99:10 101:1 102:22 123:10 127:18 134:23 138:17 140:5 152:12 168:13 189:20 194:21,23 197:14 203:7,10 212:19 213:7 specifically 10:11 16:16 24:3 27:12 28:7 39:12,23 40:6,20,25 47:1 52:16 55:23,24 59:8,20 62:7 67:7 67:12 68:9,13 69:22 73:23 74:1 82:22 85:2 96:23 97:13 103:5 121:22 124:11 137:22 138:12 139:10 147:6,12 150:2 153:22 154:21,23 159:4,8 161:3 164:11,14	164:18 172:11,22 175:15 177:2 185:9 189:4 193:24 194:17 195:13,22 204:6 205:1 211:20,24 213:9 214:20 specifications 212:25 specifics 37:17 55:5 57:17,24 88:16 100:13 119:2 120:9,14 130:25 131:3 138:6 141:2 148:18 171:1 189:8 191:20 192:10 212:11 213:13 specifies 195:2 spectrum 26:10 speculating 144:15 speculation 112:16 113:15 144:21 speed 135:10 speeds 205:2 spell 21:23,25 split 77:4,13 spoke 149:10,21 ss 218:1 stability 134:1 stabilization 69:5 181:3 stabilized 131:20 132:18 133:13 stabilizers 69:25 staff 75:4,13 152:10	stage 22:25 195:11 stages 23:3,11 stand 160:4 210:12 standard 11:24 54:15 56:18,22 57:1,24 81:15 86:1 93:19,21 95:15 108:7 109:25 110:1 119:13 125:22 126:1 129:6 139:12,14 144:19 159:22 165:13,19 165:25 166:3,5,9 167:15,23 169:12 172:17 173:24 176:15 178:13 182:13 185:13 187:5 190:19 192:4 205:19,24 206:2,6 207:16 214:25 215:3,5 standards 4:19 5:11 31:1 35:23 36:18 54:6 55:21 57:16 65:22 86:15 86:16 110:6,11,12 125:14 126:3,5 144:17 159:20 160:16 161:1,4 165:21 166:13 169:23 181:18 183:11 184:22 185:4 186:25 187:3 190:15 193:4 205:5,12 206:25 207:1,4,7 207:13 215:6 standpoint 16:12 44:25 110:23
---	---	---	---

[standpoint - sure]

Page 39

111:8 118:17 132:13 167:21 202:11,16,18 stands 46:1 134:23 start 39:20 143:5 143:19 149:8 started 8:22 9:25 12:13 15:10,12,14 16:20 17:20,24 18:1 27:3 32:18 38:4 60:8 61:4 101:24 153:18 154:24 187:19 201:21 starting 142:19 starts 31:16 78:18 state 1:20 8:7 16:13 218:1,5 220:6 stated 66:13 statement 27:21 58:23 93:10 94:12 94:13 95:13 105:5 109:20 128:21 134:12 173:2 180:24 statements 6:11 167:21 states 1:1 122:12 153:3 172:13 175:7,9 176:9 stating 16:17 133:10 153:3 status 96:16 128:6 128:19 140:22 141:20 157:20 stayed 13:11 101:3 198:20 stays 81:2 steep 167:9	stenograph 218:16 steps 26:23 59:17 132:8,19,23 145:20 181:7 186:19,23 steve 23:16,17 24:8 25:25 92:21 97:19 146:23 stood 144:17 stop 19:3 stopped 154:1,3 storage 126:13 strategic 147:21 147:25 strategies 67:5,9 strategy 3:7,9,14 89:19 91:8 92:5 112:9 113:12,23 118:20 126:22 142:23 147:17,20 158:23 159:16 160:19 stream 190:25 street 2:9,20 strength 134:1 stress 189:16 strife 199:3 strike 112:12,19 200:7 structure 35:9 215:12 student 8:9 studies 8:12 study 47:3 163:15 180:21 studying 59:2 stuff 84:4 sub 19:17 subgroup 124:23 subject 53:3 121:14 140:22	148:10 184:6 220:11 submit 138:17 submitted 61:23 62:4 107:14 subparagraph 139:2 subscribed 222:16 subsection 46:13 79:25 subsequent 59:4 97:10 183:13 216:14 subsequently 91:7 114:2 substance 7:4 222:10 succeeded 203:15 success 45:8 suddenly 114:10 sued 213:12 sufficient 177:21 suggesting 106:25 suggestion 8:15 suit 77:23,24 suite 2:5,20 summarize 95:7 summary 71:9 74:21 85:14,14 172:13 195:17 supervisor 21:4,12 60:25 supplied 177:16 supplier 130:14 suppliers 187:7,8 187:9 191:24,25 192:5,9,11 196:21 supply 74:20 203:12 204:12 support 10:9 11:16 31:11 32:20	33:24 42:18 75:6 163:9 168:24 198:25 supporting 61:13 162:16 supports 48:10,16 supposed 6:24 109:17 sure 4:25 7:6 8:19 13:5 14:7,24 15:15 17:4,11,25 18:4,19,23 19:6,9 20:6 24:5 26:11 28:2,25 29:19 33:12 34:12 37:6 38:3,15 41:10 44:10 45:10 48:3 50:12 53:21 54:1 54:22 60:14 62:2 62:7,9 63:9 64:4,8 66:16 67:7,12 70:5 73:17 75:21 80:12 81:14,17 84:11,17 87:16,19 88:20 90:19 93:4 93:8 94:16 95:5 100:2 104:3 105:3 105:4,9,10 106:23 107:18,21 109:19 110:22,22 111:16 113:5 115:10 118:16 123:15,21 126:8,10 128:11 132:12 138:5 147:7 151:1,12 152:14,17 153:19 156:23 161:6 164:24 168:16 173:4,5 178:6,20 178:22,25 180:5 180:20 181:10,22
--	---	--	--

[sure - testing]

Page 40

182:1 186:8,17 187:1 189:25 190:10 191:2 192:25 195:9 196:5 200:1 203:25 205:3,15 207:22 209:14 213:17 surface 181:3,14 204:17 surfactant 204:14 204:16 suspended 64:25 65:16 sustainable 65:1 switched 34:8 sworn 1:18 4:2 218:7 222:16 syllables 46:4,6 synopsis 71:18 system 33:22,23 33:25 34:2,3 44:24 73:15 106:3 117:11 118:5,7 120:1 191:6 206:12 systems 116:18 117:1,9,13,15 118:2,9,15 169:14	120:3 121:8,10,16 123:23 126:19,25 129:17,24 135:24 136:3 140:15,24 145:20 146:2,9 148:5,13 156:22 157:4,12 158:21 159:1 163:17,25 164:7 170:14,21 173:5 178:8 184:3 184:9 188:14,18 191:11,16 193:14 194:2,9,13 197:6 200:15 202:24 207:20 209:19 210:22 211:12 213:14 taken 1:20 26:23 59:17 60:15 116:2 132:8,19,23 153:14,24 156:24 181:7 186:19 194:4 213:18 218:10,15 talk 4:24 6:18,21 talked 61:21 74:11 179:4 talking 17:7 28:20 53:22,23 82:10 83:1 106:12 150:11,12 190:3 target 128:7 targets 135:6 task 125:16 tasked 125:8 td 67:14,16,21 team 10:2 11:21 17:12,12 26:25 27:1,4,7,9,16,18 41:6 43:2 90:10 124:19 125:2	178:16 179:1 teams 14:18 15:2 16:25,25 21:13 36:22 technical 33:7 34:4 75:2,6,7 87:18 131:24 168:24 169:5 technology 48:6 175:1 tell 4:2,22 41:22 53:3,4 91:22 100:11 102:20 120:3 121:16 124:3 127:1 136:4 140:24 157:13 159:1 164:7 170:22 182:12 184:9 188:18 191:16 193:19 194:13 203:5 207:1 218:8 temp 168:1 temperature 167:4 168:10 temperatures 168:2,6 190:23,23 temporal 183:9 tend 199:19 tension 204:17 tenure 25:23 29:7 60:24 term 22:17,23 25:16 30:18 43:24 45:2,20 67:14 82:11 112:1 114:24 175:13,20 terms 52:17 69:17 80:17 97:8 106:11 121:25 138:22 150:24 169:10	176:2 197:20 215:11 test 30:8,9 31:2 32:9 53:9 66:21 70:13 88:9 105:14 105:16 109:4,13 110:22 119:13 122:15 123:5,12 123:14,16,18,21 131:21 142:20,21 143:7,10,10 150:7 150:23 151:6,18 151:21 153:17 163:8 167:12,13 168:4 176:16 180:11 189:25 190:18,20 tested 53:9,12 71:15 114:3 123:6 123:9 134:10 141:23 142:3,6 168:1,9 170:5 189:22 192:8 testified 4:4 182:9 208:3 214:13 testify 5:15 testimony 4:11 186:14 205:9 216:2 218:18 testing 19:5 39:20 39:21 69:3 73:18 93:23 94:1,8 99:24 105:24 106:5,21 107:4 119:12,14,15 123:1,3 131:1,25 142:12 143:5,11 143:15,16 144:2,4 147:19 148:11 149:11,12,22,23 150:12 151:10
t			
t 219:9 221:3 take 4:11 5:7,10 8:3,20 30:2 37:10 41:14,21 42:5,8 46:10 48:22 54:23 57:8,21 60:13 78:1 88:7 89:16 91:18,21 95:3 100:6 102:14 106:4 115:20 116:1 119:19,20			

[testing - tollgate]

Page 41

152:7,13 154:25 155:25 156:5,16 157:25 165:6,21 167:2 168:12,14 175:17 183:8,13 183:15,19,20 187:1 189:15,17 189:18,19 190:16 191:23 192:6 193:25 213:2 214:8 testings 119:7 tests 94:4 106:15 110:20 123:4 150:15 151:23 165:14 180:15 181:6 189:13,16 189:20 190:13 192:16 text 34:25 122:4 165:17 theories 47:2,4 59:1 83:22 84:5 93:17 95:19 133:15 theorized 161:16 theorizing 83:22 109:7 theory 115:14 175:22 179:19 thereabouts 17:7 thereof 1:25 thermo 181:2,13 thermocyclic 190:13 thermocycling 190:16 thing 38:11 82:16 108:16 182:16 things 67:7,10 74:1 87:25 99:18	152:12 181:25 190:2 203:25 206:8,16 212:3,13 think 5:21 18:4,13 22:5 34:13 39:4 40:6,7 43:15,22,23 48:11 54:7 56:24 59:1,2 65:19 66:17 80:24,25 84:2,3,9 85:2 96:17 99:12,14,17 99:23,23 101:10 101:13 104:7 107:22 109:6 112:8 115:12 118:13 134:13 140:8 144:15 146:15 150:4 152:1 155:5 157:16 158:2,11 159:5 161:6 169:22 174:7 180:6 182:9 203:20,24 204:4 204:18 205:17 206:17 209:15 215:11 thinking 108:25 third 43:1 49:3 64:22 65:7 66:10 66:10 70:6 71:13 93:9,13 94:23 98:16 99:1,3 128:20 129:3 159:13 164:19 thirty 220:16 thorough 168:15 thought 6:10 72:19 106:25 107:3 112:6 156:21 158:7	thoughts 87:20 threaten 51:14 52:2 threats 159:19 160:12 three 18:7 21:10 21:15 22:5,8 46:14 138:13 139:2 142:17 143:5,18,25 144:11 168:6 174:12,13 time 1:25 4:13,14 4:20 14:4 15:7,11 17:14 19:21 25:1 25:19 26:2,21 27:18 28:18 29:18 30:19,20,25 31:4 32:18 34:23 37:19 37:21,23 38:20 39:13,19 40:16 43:15 46:21 47:24 54:17 56:18 57:17 58:5,9,14 60:12 69:16 70:4 75:16 77:6 82:6 83:11 83:15,15,20 85:9 86:20 90:24,25 95:19 96:25 99:6 100:15 108:2,19 111:16 112:5 113:10,24 114:4 121:4 122:2,19 123:9,11,16 124:13 125:3 127:5 130:9 132:5 132:14 135:11 137:6,11 139:22 141:12,15,17 142:3,4,7,24 143:17 144:17	147:1 149:10,21 152:15,18 153:13 153:15,21 154:5 154:11 155:5,15 160:2,10,22,24 162:17 165:15 166:6,25 167:10 171:15,20 172:23 178:21 181:8 190:3,7 198:7 199:25 201:3,3,21 207:23 209:8 211:4 213:21 214:13,16 215:20 216:5,9,14,23 timeline 165:20 168:3 times 21:17 24:19 27:14 68:5 84:2 101:15 154:13 timing 34:12 171:3 title 17:19,21 29:19 30:25 46:11 48:25 50:23 75:21 80:3 92:4 102:19 209:3 211:11 titled 58:15 66:1 titles 35:16 tjb 1:2 today 4:11,18 5:15 6:4,19 33:3 60:7 90:14 201:16 205:9 216:14 today's 7:3,9 todd 26:6 told 38:16 tollgate 3:20,21,22 22:19,21,23 23:14 62:17,17 194:11 194:18,25 195:2,3
--	---	---	--

195:7,12,13,15 197:10,19,20 200:18,25 201:1,7 201:8,9,10 203:2,8 tollgates 23:4,5,20 tone 103:16 tool 70:22 78:23 177:7 tooling 11:19 197:23 tools 10:15 top 6:1 14:8 23:24 28:1 43:9 45:6 47:14 50:19,23 52:23 64:16 66:1 85:6 86:19,22,25 88:8,11 98:4 100:10 102:19 110:17 119:23 120:2 121:13 124:1,7 135:25 146:16 148:8,9,24 149:4,5 155:7 157:7,8 159:13 162:12 164:20 165:3 170:8 176:4 176:5 179:18 180:23 184:4 193:9 200:17,24 215:7 topic 57:4 58:3 60:19 64:21 203:12 topics 61:21 tordoff 101:13 total 3:10 116:20 129:20 130:1,4,5,7 130:11,13,17,18 130:24 131:8,11 132:3,11,20 133:7 134:13 135:5	177:16,19 195:21 total's 130:21 touch 47:23 touched 63:5 toxicity 169:12 tpi 131:23 track 28:20 90:3 200:9 tracking 125:9 train 112:5 transcript 6:9,14 218:17,18 220:17 220:18 transcription 222:7 transfer 55:8 172:17 176:15 transferred 38:13 transition 123:20 translated 218:16 transmittal 103:12 transmitted 103:18 123:22 trial 1:24 218:14 trials 59:21 85:25 177:15 tried 133:1 163:15 163:15 triggered 154:18 triggering 121:3 true 218:18 trust 216:6,9,12 216:16,17 trusted 109:10 truth 4:2,2,3,22 218:8,8,9 try 4:24,25 78:23 83:12 112:10 151:3 166:22 187:11 190:4	trying 16:3 23:8 27:24 28:9 38:20 40:17 44:11 54:7 55:14,19 56:17 59:23 62:3 65:13 70:18 78:10 86:7 94:17,20 96:19 99:14 100:14 103:17 111:13,23 117:20 128:13,15 129:7 144:19 151:16 158:10,15 160:25 176:19 179:5 185:8 195:25 206:17 tube 77:10 176:4,4 176:5 tubing 15:10,13,19 16:1,3 17:10 18:22 37:8,12,18 44:3,3,7,8 45:23 45:25 48:8,13,16 53:8 59:16,22 63:16,20,20 70:15 70:22 108:18 116:14,16 119:8 121:2 127:25 132:4 134:6 135:17 142:6 151:10 152:16,21 153:11,14,18,20 153:23 154:2,3,10 154:12,25 161:8 162:7 175:24,25 176:3,6 181:1 197:2 204:11 214:10,14 215:21 tubings 154:17 turn 42:15 43:6 46:8 50:16 57:2 57:25 58:1 60:9	65:25 71:7,22 72:10 74:18,22 76:16 82:24 85:5 98:23 131:5 144:22 161:9 172:12 178:14 180:22 182:17 turning 64:18 179:17 turns 46:9 two 24:10 49:1 57:6 77:2,3 98:18 100:7 128:23 129:2,10 138:7 146:3 147:16 159:15 169:15 177:15 188:15 214:23 type 78:19 175:24 206:7 types 59:21 87:10 typical 22:25 197:20 typically 23:12 44:3 52:13 63:1 73:6,13 78:8 79:8 89:2 106:11 111:8 128:3 135:11 189:15 195:4 199:16
u			
u 21:24 179:13 219:9 uh 57:11 59:5 81:9 83:4 92:3 100:17 214:12 ul 71:15 ultimately 118:25 122:21 177:6 192:23 215:17			

[unacceptable - wanting]

Page 43

unacceptable 166:13 182:15 189:11 unannounced 66:21 uncoiled 45:12 underlying 72:21 undermine 156:7 underperforming 182:5 understand 5:3,11 14:24 16:4 23:8 36:22 40:17 41:24 44:11 47:5 59:18 59:23 62:10 68:16 78:23 80:5 86:7 94:2,20 95:5 96:19 105:21 106:23 117:4,20 149:14 151:16 169:9 172:3 174:3 176:20 179:5 183:8 186:13 196:14 205:3 207:22 understanding 18:17 40:12 43:3 44:13,22 45:3 51:2 53:5 55:13 56:5 58:22 65:10 68:7 69:11,18 70:2 73:18 76:9 80:14 81:22 99:19 105:23 106:3 107:23 108:20 109:16 110:6 111:12 116:6 117:3,21 120:11 123:17 133:1 138:21 139:18 149:25 151:9	152:5 155:14 160:3 163:6 166:6 167:11 168:19 169:2,8 171:7 182:12 201:17,19 understood 5:5 16:18 33:15 undertaking 93:19 undertook 59:12 71:24 184:24 187:7 underway 150:13 unfavorable 215:12,13 uniform 180:2 uniformly 46:16 union 189:3,6,10 unit 135:11 united 1:1 175:7,9 university 8:7,10 update 123:24 124:21,24 125:4 157:10,21 198:13 updates 91:8 updating 127:19 upheld 105:14 uponar 88:24 201:20 202:2,18 upper 22:16,17 159:23 use 22:17,23 25:16 39:1 41:2 44:23 47:8 48:7 70:17 99:15 116:14,19 116:23 118:1 175:2 178:6 185:20 205:23 useful 177:5 user 207:2 uses 178:5	utilize 192:14 196:9 utilized 116:17 117:13 130:22 utilizing 192:12 v v 220:1 221:1 222:1 vague 115:1,1 valentine 100:16 101:12,18 102:4 103:1 119:24 120:24 121:24 122:11 136:1,12 137:13 139:5 140:7 148:10 155:2,9 157:23 158:14 valid 180:11 value 215:16 variability 69:7 82:5,10,12,16,20 83:6,17 172:21 174:14,16 176:12 variable 181:4,20 variation 95:14 175:23 183:9 variations 175:11 various 21:13 23:10,12 24:19 27:14 28:17 42:8 43:1 135:14 168:1 171:19 vast 36:3 veritext 2:19 versa 64:12 version 90:1 125:5 128:25 versus 39:21 61:7 61:13 63:20 64:10 64:11 87:23	169:19 180:19 214:5 viability 159:16 vibien 3:12 18:3 18:14 27:10 101:9 101:25 146:7,21 vibien's 147:13 vice 64:12 74:20 view 40:18 177:6 180:10 202:17 viewed 182:15 vintage 131:16 vinyl 46:2 virtually 132:1 133:17 vis 18:9,9 vision 210:17 visitor 130:2 voc 78:4,5,7,16,17 78:18 79:9,18 voice 78:8 voluntarily 111:1 vs 1:10 135:14 w w 2:4 wacker 2:4 want 16:19 45:12 60:18 68:13 74:18 80:19 81:3 89:22 115:20,25 161:25 170:6 196:8 199:19 205:3 207:20 213:15 216:3 wanted 16:2,14,18 47:3 56:23 64:23 80:1 88:6 97:16 174:3 196:8 wanting 33:19 49:15 197:22
---	---	--	--

warn 111:14	whereof 219:4	147:10 156:12	206:1,13 209:1
warnings 111:19	whq 142:14	173:9	wrote 7:14 89:22
warranty 116:21	wide 53:24	working 11:5	90:18,21 91:9
116:22,25 205:15	wilson 17:15 21:3	12:10 13:15 15:13	92:7 111:13
water 9:2,3 12:9	21:4 25:25 92:21	17:14,20 18:10	wrought 188:6
12:15,22,23 13:2	96:11,14,23 97:4	19:3,11 22:10	wynn 92:22
13:11,13 44:6	140:21 141:17	27:16 32:20 42:6	y
169:14 204:17	146:22 184:5	61:14 107:25	y 219:9
way 17:19 42:10	wing 210:10	125:2 127:24	yeah 62:9 79:11
44:1 80:4 91:23	wise 68:6	133:14 140:10	87:17 92:1 100:19
105:21 107:8	withdraw 104:25	176:19 197:16	105:7 109:6
109:9 110:5	withdrawn 104:21	206:11	110:22 113:5
111:17 131:9	witness 1:17 35:2	works 33:3 52:25	157:16 190:15
135:15 137:24	112:4,19 113:5,17	59:15 204:22	200:5
149:19 155:16	115:3,23,24 122:6	world 29:22	year 9:6 93:24
175:25 180:4	152:5 165:19	142:14,15,25	110:3 116:21,25
185:13 199:21	219:4 220:3	worth 4:19 59:11	158:15 165:5,20
201:7 202:7	wood 10:17	would've 56:19,24	yearly 36:7
wayne 18:3,11	word 112:17 113:2	89:3 90:10 123:4	years 94:5 100:24
101:8,24	205:23	123:19 125:1	109:18 110:19
we've 91:19 100:6	words 6:6 7:14	142:1 151:21	116:22,24 124:14
110:24 119:19,20	26:17 29:5 40:17	161:7	131:15 144:11
140:15 146:2	53:18 67:13 79:7	wound 59:2 86:5	165:7,8,10,13,24
148:5 157:4	84:8 90:21 99:14	wow 181:25	166:1,11,15
170:14 184:3	110:9 114:9 129:9	wrap 213:16	yesterday 6:22
188:14 191:11	187:21 195:6	write 7:16,18,19	z
193:14 194:9	200:2 210:8	7:21 62:19,21,22	zealots 202:20
197:7 200:15	work 7:25 8:20,24	91:7 142:10	zurn 89:2
202:24 209:20	9:1,3,5 10:13	157:24 207:13	
210:22	11:12 13:23 15:9	writes 120:18,24	
weak 75:3	17:12 19:1,10,12	131:14 139:5,11	
week 143:18,25	19:14 27:2 29:3	writing 7:24	
209:3,6,7	31:11 67:4 87:2	written 1:24 5:21	
weeks 142:17	101:6 139:17	55:4 61:23 62:3	
143:5	147:19 160:18	63:2 71:24 84:7	
welfare 207:2	216:12,15	93:20 105:6 132:5	
went 9:5 23:22	worked 9:8,21	135:4 149:19	
56:3 75:24 87:19	10:15,16,18,21,21	205:16	
98:19 162:3	10:22 13:20 15:25	wrong 33:10,13	
west 8:23	16:24 60:2 87:9	43:25 84:10 104:8	
	98:6 100:20	144:22 160:17	

Federal Rules of Civil Procedure

Rule 30

(e) Review By the Witness; Changes.

(1) Review; Statement of Changes. On request by the deponent or a party before the deposition is completed, the deponent must be allowed 30 days after being notified by the officer that the transcript or recording is available in which:

(A) to review the transcript or recording; and

(B) if there are changes in form or substance, to sign a statement listing the changes and the reasons for making them.

(2) Changes Indicated in the Officer's Certificate. The officer must note in the certificate prescribed by Rule 30(f)(1) whether a review was requested and, if so, must attach any changes the deponent makes during the 30-day period.

DISCLAIMER: THE FOREGOING FEDERAL PROCEDURE RULES ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

THE ABOVE RULES ARE CURRENT AS OF SEPTEMBER 1, 2016. PLEASE REFER TO THE APPLICABLE FEDERAL RULES OF CIVIL PROCEDURE FOR UP-TO-DATE INFORMATION.

VERITEXT LEGAL SOLUTIONS
COMPANY CERTIFICATE AND DISCLOSURE STATEMENT

Veritext Legal Solutions represents that the foregoing transcript is a true, correct and complete transcript of the colloquies, questions and answers as submitted by the court reporter. Veritext Legal Solutions further represents that the attached exhibits, if any, are true, correct and complete documents as submitted by the court reporter and/or attorneys in relation to this deposition and that the documents were processed in accordance with our litigation support and production standards.

Veritext Legal Solutions is committed to maintaining the confidentiality of client and witness information, in accordance with the regulations promulgated under the Health Insurance Portability and Accountability Act (HIPAA), as amended with respect to protected health information and the Gramm-Leach-Bliley Act, as amended, with respect to Personally Identifiable Information (PII). Physical transcripts and exhibits are managed under strict facility and personnel access controls. Electronic files of documents are stored in encrypted form and are transmitted in an encrypted fashion to authenticated parties who are permitted to access the material. Our data is hosted in a Tier 4 SSAE 16 certified facility.

Veritext Legal Solutions complies with all federal and State regulations with respect to the provision of court reporting services, and maintains its neutrality and independence regardless of relationship or the financial outcome of any litigation. Veritext requires adherence to the foregoing professional and ethical standards from all of its subcontractors in their independent contractor agreements.

Inquiries about Veritext Legal Solutions' confidentiality and security policies and practices should be directed to Veritext's Client Services Associates indicated on the cover of this document or at www.veritext.com.